

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Wireless E911 Location Accuracy)	GN Docket No. 11-117
Requirements.)	
)	
In the Matters of IP-Enabled Services)	WC Docket No. 05-196
E911 Requirements for IP-Enabled)	
Service Providers...)	
)	
In the Matter of Facilitating the)	PS Docket No. 11-153
deployment of Text-to-911 and other)	
NG911 applications. Framework for Next)	
Generation 911 deployment.)	
)	
In the Matter of Framework for Next)	PS Docket No. 10-255
Generation 911 Deployment.)	

**PETITION OF TELECOMMUNICATION SYSTEMS INC. FOR DECLARATORY
RULING AND/OR RULEMAKING**

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SUMMARY

In this Petition for Declaratory Ruling and/or Rulemaking, TeleCommunication Systems, Inc. ("TCS") moves, pursuant to 47 C.F.R. §§ 1.2 and 1.401, that the Federal Communications Commission ("Commission" or "FCC") institute a formal rulemaking proceeding to provide guidance as to the applicability of 28 U.S.C. § 1498 in those circumstances where a wireless carrier or E911 services provider, in the course of complying with 47 C.F.R. §§ 9.5, 20.18 in the offering of E911 services, is alleged to have infringed upon a patent and the allegation involves a claim that the infringement is based on compliance with an FCC Order, standard, or regulation. More specifically, TCS requests that the Commission issue guidance that in all circumstances such compliance is in furtherance and fulfillment of a paramount Government policy and is therefore equivalent to an action that is "by or for" the government and with the Government's permission consistent with the language of 28 USC §1498. In the alternative, TCS requests that the Commission establish rules that provide for licensing of patents covering E911 services and capabilities pursuant to reasonable and non-discriminatory ("RAND") terms consistent with previous decisions by the Commission under its patent procedures.

Commission action is required in this instance because the lack of a Commission policy as to patent interference management has become a significant roadblock to the provision of E911—a roadblock that will only increase as Next Generation 911 ("NG911") services are implemented and widely deployed. As long ago as 1961, in the *Revised Patent Procedures of the Federal Communications Commission*,¹ this agency recognized the danger that the prejudicial use of patents could pose to the provision of new communications services and expressed the expectation that "[w]henver it appears that the patent structure is or may be such

¹ Public Notice – Revised Patent Procedures for the Federal Communications Commission (December 1961) 3 FCC 2nd pp 26-27

as to indicate obstruction of the service to be provided under the technical standards promulgated by the Commission, this fact will be brought to the Commission's attention for early consideration and appropriate action."

By virtue of its Petition, TCS is bringing this very serious patent-related problem to the Commission's attention and urges prompt action because Commission mandated E911 regulations have had the unintended consequence of engendering an onslaught of predatory patent litigation. As a result, the public may suffer disruption of current E911 services, and faces the real potential for delay or loss of NG911 services, due to the repeated infringement lawsuits filed primarily by patent assertion entities ("PAEs") that seek to enforce their claims by asserting that deployment of the capabilities (including technologies, systems, and methodologies) necessary to provide E911 services (and very soon NG911 services) in compliance with FCC orders, regulations, or standards is the proximate cause of alleged infringement. Taking advantage of the mandatory nature of the Commission's E911 regulations, PAEs have forced wireless carriers and E911 services providers (such as TCS), into the dilemma of either facing the unacceptable consequences of violating or being a party to violating FCC licensing standards or being adjudicated as a patent infringer. As described by the International Telecommunications Union ("ITU") patent litigation has become rampant and there has developed a trend to use standards-essential patents to block markets.

Until now, the Commission has not addressed the question of patent rights in the context of its E911 regulations and standards. However, it has ample authority to do so. Under Title I of the Communications Act, as well as the provisions of the NET 911 Act and the 911 Act, the Commission, acting in furtherance of its public safety policies, has authority to provide guidance to make clear the link to 28 U.S.C. § 1498 because of the mandatory public safety nature of the

E911 regulations. In the alternative, the Commission also has the authority to establish rules that provide for licensing of patents covering E911 services and capabilities pursuant to reasonable terms and conditions that are demonstrably free of any unfair discrimination. The Commission has exercised similar authority in the past. Moreover, prompt Commission action is required because unfolding events at the international level make it imperative for the FCC to express its views.

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See also, Brian Cook, Clearing a Path for Digital Development: Taking Patents in Eminent Domain Through the Adoption of Mandatory Standards, 82 S. Cal. L.Rev. 97, 126 (2008) ("Cook") ("Thus, it is arguable that the FCC's regulations requiring the inclusion of digital tuners in all television sets fall within the purview of § 1498").

for licensing pursuant to reasonable terms and conditions that are demonstrably free of any unfair discrimination.⁴

I. BACKGROUND

A. Identity of TCS

Since deploying the first U.S. wireless E911 solution in 1997, TCS has been a leading provider of public safety solutions for wireless E911, NG911, and 1-1-2.⁵ Today, TCS supports approximately 50 percent of all U.S. wireless E911 calls. Its industry award-winning wireless and VoIP E911 products, together with wireline E911 solutions, serve over 140 million wireless and IP-enabled devices.

With the nation's only non-carrier TL 9000-certified wireless and VoIP E911 Network Operations Center, TCS' highly-reliable E911 solutions ensure that a subscriber's emergency call routes to the appropriate Public Safety Answering Points (PSAP) and automatically pinpoints the caller's location information.⁶ Indeed, many of TCS' customers are Commission regulated wireless carriers or interconnected VoIP service providers and, thus, are dependent on TCS to provide E911 services and capabilities in order to comply with Commission regulations.

B. Interest of TCS

TCS believes in and supports a robust intellectual property ("IP") and licensing system in the U.S. For example, as a telecommunications vendor and services provider, TCS has over 210

⁴ Proposed rules are attached as Annex A. It would be unnecessary for the Commission to adopt the proposed rules if it were to grant TCS' request for a Declaratory Ruling.

⁵ "E911" is Enhanced 911 and "NG911" is Next Generation 911. NG911 typically is understood to include text-to-911 and video-to-911. "1-1-2" is the universal emergency number used in the European Union.

⁶ TCS is subject to Commission regulation as a VoIP Positioning Center (VPC). *See* Report and Order, *In the Matter of Implementation of the NET 911 Improvement Act of 2008*, FCC 08-249, WC Docket 08-171, 23 FCC Rcd 15884, 15896 ("NET 911 Order").

issued patents and over 300 patent applications pending worldwide.⁷ TCS regularly evaluates the competitive value of its portfolio and licenses its IP as appropriate. Likewise, TCS is mindful of IP held by others and proactively seeks out licenses when necessary.

Unfortunately, TCS has recently been a target (directly or indirectly via its customers) of predatory patent infringement suits based on its role as a provider of E911 services and capabilities, even though the E911 services and capabilities provided by TCS are required by the FCC's 911 regulations as set forth in Section 20.18 of the Commission's Rules and in various agency decisions. These cases typically allege infringement based on the mere fact that the defendant is in compliance with the Commission's E911 regulations.^{8,9}

For example, the infringement allegations may be premised on the theory that the use of the "systems and methodology"¹⁰ necessary to combine wireless systems with "location-finding technology" in order to comply with the Commission's E911 Phase II location accuracy requirements¹¹ reads on one or more claims of the patent-in-suit.¹² Indeed, in *Tendler Cellular of Texas, LLC v. MetroPCS Communications, Inc. et. al*, Civil Action No. 6:11cv00178 (EDTX), the plaintiff specifically cited "MetroPCS' location-based service systems, including but not

⁷ More information is available on TCS's website, www.telecomsys.com, and at the investor relations section: <http://phx.corporate-ir.net/phoenix.zhtml?c=123361&p=irol-news&nyo=0>

⁸ In fact, the number of patent litigations initiated across the country from January 2010 to present which cite the accused infringer's provision of E911 or location-based services or capabilities is surprising, yet likely to be only the "tip of the iceberg." See, e.g., Exhibit A ("Lawsuit Matrix").

⁹ To date, the majority of these cases are launched by what the Federal Trade Commission has termed Patent Assertion Entities ("PAEs")⁹ – firms whose business model is focused on purchasing and asserting patents against industry participants already using the technology, rather than developing and transferring new technology and IP.

¹⁰ Not all patents are based on a unique "technology." It is possible to have a patent on a "method" of doing business or a process leading to a result. Therefore, despite popular assumptions to the contrary, there are often no "work-arounds" to an infringement claim for a method patent by merely applying a different technology to achieve the same goal. See http://en.wikipedia.org/wiki/Business_method_patent; <http://www.uspto.gov/patents/resources/methods/index.jsp>

¹¹ 47 C.F.R. § 20.18 (h). See also Second Report and Order, *In the Matter of Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-144, FCC 10-176 (September 23, 2010) [E911 Location Accuracy Second Report and Order].

¹² See Exhibit B EMSAT Complaint at ¶¶ 16-18.

limited to their E911 provision and MetroNavigator system" as the principal basis for its infringement claim.¹³ TCS' and its customers' continued ability to provide these services and capabilities, which are so critical to public safety and homeland security, are threatened by these lawsuits.¹⁴ FCC intervention is necessary to prevent this looming market failure.

It must be noted that TCS and its customers are not alone in this new era of litigious activity surrounding E911, NG911, and patents relating to location-based services. In fact, the infringement allegations in a recent suit filed by MOSAID Technologies Inc. against HTC America, Inc., and Sony Ericsson Mobile Communications (USA), Inc., in the District of Delaware on July 7, 2011, involves and implicates cellular telephones that implement the E911 standard, as mandated by the Commission. In particular, the complaint states:

Each of the foregoing phones has embedded emergency call features, including the ability to make emergency calls without a SIM card inserted in the phone, or while the phone's SIM card is locked, a GPS receiver that uses satellite signals to calculate the location of the phone, as well as assisted GPS to calculate phone location even more quickly. *Each of the foregoing phones transmit GPS-based location information providing the whereabouts of the phone when the phone makes an emergency call.* Each of the foregoing phones is capable of making an emergency call as a result of a voice command to the phone.¹⁵

As the Commission has recognized, the location accuracy rules that are cited in the infringement allegations not only further the FCC's "long-standing public safety and homeland security goals," but are critical because they are designed to "minimize potentially life-threatening delays that may ensue when first responders cannot be confident that they are

¹³ See Exhibit C Tendler Complaint at ¶14 (MetroPCS is a customer of TCS and TCS is an indemnifying party).

¹⁴ As a consequence of the importance of a reliable and nationwide 911 system to national security, the FCC's Public Safety and Homeland Security Bureau has a significant role in developing 911 regulations and standards. The Department of Homeland Security also recognizes the importance of the 911 system and encourages reports through 911. "<http://www.dhs.gov/xutil/contactus.shtm>"<http://www.dhs.gov/xutil/contactus.shtm>

¹⁵ See Exhibit D, Mosaid Complaint at ¶ 12.

receiving accurate location information."¹⁶ If left unchecked, the use of compliance with essential mandated government requirements, such as E911 location accuracy, as a basis for a patent infringement claim by the patent holder may ultimately have the effect of obstructing the deployment of the capabilities necessary to provide the required accuracy for all forms of E911 and NG911 services. This in turn will affect not only consumers' ability to access 911 and E911 services, but also the costs that the consumers or local governments must bear.

Given the mandatory nature of the FCC's regulations, suppliers of E911 location-based services within the regulatory authority of the FCC (including VPCs such as TCS) lack the negotiating leverage they would have in a more typical market situation unhindered by such regulatory concerns. Instead, regulated companies find themselves in the position of choosing among the equally unacceptable options of: (1) violating of FCC rules; (2) accepting non-RAND licensing terms offered by E911 patent holders; (3) litigating in an attempt to invalidate the asserted claims and to fend off accusations of infringement; or (4) exiting the business altogether. TCS and/or its indemnified customers have the ability to defend against such patent infringement suits with, among other defenses, an affirmative defense under 28 U.S.C. § 1498, based on the fact that the E911 services providers acted in furtherance and fulfillment of a stated government regulation or policy and that there was only one method for compliance, *i.e.*, the method cited by the patent holder.¹⁷ However, an affirmative defense is not a jurisdictional bar to an infringement suit.¹⁸

¹⁶Wireless E911 Location Accuracy Requirements, Second Report and Order, PS Docket No. 07-114 at ¶ 12 (Sept. 23, 2010).

¹⁷See Cook at 124.

¹⁸See, e.g., *Toxgon Corp. v. BNFL, Inc.*, 312 F.3d 1379, 1381 (Fed. Cir. 2002); see also *Manville Sales Corp. v. Paramount Sys., Inc.*, 917 F.2d 544, 554 (Fed. Cir. 1990) (citing and explaining *Sperry Gyroscope Co. v. Arma Eng'g Co.*, 271 U.S. 232, 235-236 (1926)).

Accordingly, when used as an affirmative defense, 28 U.S.C. § 1498 does not deprive a district court of jurisdiction and, thus, cannot be dealt with early in the case with a motion to dismiss under Fed. R. Civ. P. 12(b) (1). Instead, issues regarding the application of § 1498 must be resolved by summary judgment under Rule 56, typically after a lengthy and expensive discovery period.¹⁹ Therefore, it is not surprising that the expense required to reach the summary judgment phase of a case often forces defendants to settle before the various defenses are even considered by a Court in an effort to avoid further legal fees.²⁰ Furthermore, because the Commission has not provided any guidance as to application of § 1498 for E911 services providers, the opposing party may still attempt to convince a court that the alleged infringement does not fall under the provisions of 28 U.S.C. § 1498, because the use is not "by or for" the U.S. government. Consequently, although a number of regulated companies have been victims of these lawsuits for some time now, they have not yet brought them to the Commission's attention, partly because the cases settle for economic (not legal) reasons and defendants are motivated by a desire to avoid encouraging even more lawsuits of this type.

The public safety community is certainly not blind to the impact of predatory IP litigation on their community and the public. For example, as the "only professional organization solely focused on 9-1-1 policy," the National Emergency Number Association ("NENA") works "to establish industry leading standards, training, and certifications" for the promotion of "effective

¹⁹ *Toxgon Corp.*, 312 F.3d at 1382 (citing *Crater Corp. v. Lucent Techs. Inc.*, 255 F.3d 1361, 1364 (Fed. Cir. 2001)). It is not uncommon for the case to have been litigated for 18 to 24 months before it would be proper to file an affirmative defense invoking § 1498 with all of the expenses associated with such significant litigation.

²⁰ In 2007, the biennial American Intellectual Property Law Association economic survey pegged actual litigation costs for *successfully defending* a patent infringement case at up to \$4 million per case (for smaller cases). Other authors cite similar costs. Note that costs rise proportionally with the value of the patent rights at stake in the case; if the rights are more valuable, the litigation costs increase. Also, these are only the direct litigation costs and do not include significant company administrative and other costs (*e.g.*, costs of discovery, executive time, travel, etc.).

and efficient public safety solutions".²¹ NENA has instituted an Intellectual Property Rights ("IPR") policy in which the objectives include protecting the IPR of participants and ensuring that companies implementing products and services according to NENA standards are not unreasonably inhibited by IPR licensing requirements.²² The essence of the NENA policy is the management of IPR when industry standards regarding 911 services are being developed. Compliance entails mandatory notice to others that IPR relevant to a developing standard exists, and mandatory agreement by the IP holder that licensing will be on RAND conditions, or for free. However, not all patent holders are within the reach of NENA. For example, PAEs, which hold a large number of patents relating to 911 services, are conspicuously absent from NENA's membership. This means that the industry has limited ability to self-regulate and needs the Commission's help.

This type of litigation has begun to draw international attention and has caused the ITU has scheduled a high-level discussion to address what it characterizes as "rampant patent litigation."²³ Discussions on the relevance of current arrangements based around RAND patent policies will be the primary focus. According to the ITU, "key protocols implemented in devices sometimes encompassing hundreds of patents. If just one patent holder decides to demand unreasonable compensation for the use of its intellectual property (IP), the cost of the device in which that IP is implemented can skyrocket."²⁴ Dr. Hamadoun Touré, ITU Secretary-General stated:

We are seeing an unwelcome trend in today's marketplace to use standards-essential patents to block markets. There needs to be an urgent review of this situation: patents are

²¹ <http://www.nena.org/?page=AboutNENA>

²² <http://www.nena.org/?IPR>

²³ International Telecommunication Union Press Release, "High-level ITU talks address rampant patent litigation" (July 6, 2012) http://www.itu.int/net/pressoffice/press_releases/2012/45.aspx (lasted visited July 16, 2012).

²⁴ *Id.*

meant to encourage innovation, not stifle it. Acknowledging patent holders and user requirements, as well as market needs, is a balancing act. This timely multi-stakeholder roundtable will help press for a resolution on some of the critical issues.”²⁵

It is clearly critical that the FCC act now to ensure that ongoing legal disputes do not disrupt the current E911 marketplace, impair 911 and E911 services, unnecessarily increase costs to consumers and local governments, or discourage or stifle innovation in the NG911 field. If left unaddressed by the FCC, E911 services providers will continue to be forced to endure prohibitively expensive patent lawsuits, enter into license agreements subject to unreasonable terms in order to provide services or capabilities in compliance with the FCC's standards, or risk violation of FCC rules and regulations. Moreover, the FCC runs the risk of being left behind by unfolding international events.

An affirmative statement by the Commission of the connection between and application of 28 U.S.C. § 1498 to these suits would preserve the patent rights of and fairly compensate all relevant patent holders, and provide a single logical forum for adjudication of their intellectual property rights. This statement would have the additional benefit of leveling the playing field between IP holders only interested in litigation settlement for monetization, and public safety defendants.²⁶ TCS respectfully urges the Commission to issue a Declaratory Ruling that the "by and for the government" and with the government's "authorization or consent" aspects of 28 U.S.C. § 1498 are met upon compliance with E911 and NG911 regulations, or in the alternative,

²⁵ *Id.*

²⁶ See Footnotes 9 for references to the discussion of Patent Assertion Entities (PAE) and their business model for IP monetization. TCS has no desire to interfere with the legitimate rights of IP holders and their monetization efforts, and believes the application of 28 U.S.C. § 1498 supports IP holders. However, as detailed by the FTC in its report, PAEs have created an IP assertion litigation business model based upon an anomaly in the patent prosecution process that results in an unfair advantage to IP plaintiffs who negotiate against the high entry cost for IP defensive litigation. A clear statement by the FCC as to the applicability of 28 U.S.C. § 1498 would provide clarity to providers of E911 products and services (and future NG911 products and services) as to the IP litigation landscape and aid in reducing or eliminating monetary-only settlement incentives while fully preserving all IP rights and values with a willing licensee.

to adopt rules and/or publish guidance that requires the licensing of these patents pursuant to reasonable terms and conditions that are demonstrably free of any unfair discrimination.

II. DISCUSSION

A. The Commission Must Address the Repercussions to E911 of the Ongoing Litigation, and the Chilling Effect of Future Litigation on NG911

There is no question that wireless carriers must offer E911 services as a result of the Commission's rules enacted in 1996 and 1999.²⁷ The stated purpose of the regulations is to allow government first responders, homeland security, and other governmental public safety officials to locate 911 callers using wireless devices. As is discussed *infra*, under Titles I, II and III of the Communications Act, the Commission has broad authority to achieve these goals through the adoption of regulations, and has actively done so over the years.²⁸

Initially, the emergence of location-based E911 services was driven neither by revenue expectations nor by a clear demand from the public but, rather, by government policies promoting the universality of emergency services. For example, regulatory requirements for emergency calls in cellular systems were first established by the Commission in 1996, when it adopted the wireless E911 rules aimed at improving the reliability of wireless 911 services, and the accuracy of the location information transmitted with a wireless 911 call, as part of an overall effort to improve public safety.²⁹ Such improvements enable government emergency response personnel to ensure that Public Safety Answering Points (PSAPs) receive meaningful, accurate

²⁷ See *e.g.* Report and Order and Further Notice of Proposed Rulemaking, In the Matter of Revision of the Commission's Rules to Ensure Compatibility With Enhanced 911 Emergency Calling Systems, 11 FCC Rcd 18676 (1996) (E911 First Report and Order).

²⁸ See *e.g.* E911 First Report and Order at 18681; *see also*, Report and Order and Second Further Notice of Proposed Rulemaking, In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling systems, 18 FCC Rcd 25340, 25345-46 (2003) (E911 Scope Order).

²⁹ The basic 911 rules require covered carriers to deliver all 911 calls to the appropriate PSAP or a designated answering point. See 47 C.F.R. § 20.18(b),

location information from wireless 911 callers in order to dispatch emergency responders to the correct location and to provide assistance to 911 callers more quickly. These rules apply to all cellular, broadband personal communications service (PCS), interconnected VoIP, and certain specialized mobile radio (SMR) licensees.

Since 1996, the Commission has acted to impose E911 rules on providers of new technologies.³⁰ There is a strong legislative basis for the Commission's actions, beginning in 1999 when Congress, recognizing the importance of providing effective 911 service, adopted the 911 Act³¹ to promote and enhance public safety through the use of wireless communications services, which directed the Commission to designate 911 as the universal emergency assistance number for wireless and wireline calls.³² The purpose of the 911 Act was to improve public safety by encouraging and facilitating the prompt deployment of a nationwide, seamless communications infrastructure for emergency services. The 911 Act gave the FCC authority to regulate many aspects of 911 service.³³ Since that time, the Commission has affirmed and expanded on those efforts by exercising jurisdiction over other services to impose E911 requirements, relying primarily on its Title I authority.³⁴ That exercise of authority has been ratified, not rebuked, by Congress.³⁵

Most recently, in 2008, Congress adopted the NET 911 Act.³⁶ This legislation extended the duty to provide 911 and E911 services as established in the 911 Act to include IP-enabled

³⁰ See generally E911 First Report and Order, *supra*; E911 Scope Order, *supra*.

³¹ Wireless Communications and Public Safety Act of 1999, Pub. L. No. 106-81, 113 Stat. 1286 (1999) ("911 Act").

³² See 911 Act § 3 (codified at 47 U.S.C. § 251(e)).

³³ See Linda K. Moore, *Emergency Communications: Broadband and the Future of 911*, Summary (Congressional Research Service, December 22, 2010).

³⁴ See E911 Scope Order, 18 FCC Rcd at 25345-46, ¶¶ 12-16.

³⁵ See generally 911 Act; ENHANCE 911 Act of 2004.

³⁶ New Energy Technologies 911 Improvements Act of 2008, Pub. L. No. 110-823, 122 Stat. 2620 (2008) ("NET 911 Act")

voice services in accordance with FCC regulations, and established parity of access to communications networks necessary to complete 911 calls.³⁷ It also granted interconnected VoIP service providers with access to capabilities used by CMRS providers to provide E911 service from "any" entity that owns or controls such capabilities. The Commission's authority in this instance specifically includes entities over which it normally does not exercise any regulatory control.³⁸

Clearly, the Commission has exercised its regulatory control where necessary to promote the deployment of efficient 911 and E911 service. In WC Docket No. 05-196, the Commission noted that "[a]lthough the Commission is committed to allowing these services to evolve without undue regulation in accord with our nation's policies for Internet services, we are, at the same time, aware of our obligation to promote 'safety of life and property' and to 'encourage and facilitate the prompt deployment throughout the United States of a seamless, ubiquitous, and reliable end-to-end infrastructure' for public safety."³⁹

However, until now, the Commission has not addressed the intellectual property issues that have arisen for E911 services providers as a result of those rules. In fact, the evolution of E911 and NG911 services has had the untoward consequence of exposing those entities attempting to comply with Commission standards to a greater number of patent enforcement lawsuits.

³⁷ P.L. 110-283, § 101, §§ 6(a), 6(b), 122 STAT

³⁸ See *In the Matter of Implementation of the NET 911 Improvement Act of 2008*, WC Docket No. 08-171 at ¶¶ 26-29. (Oct. 21, 2008) ("NET 911 Order").

³⁹ First Report and Order and Notice of Proposed Rulemaking, *In the Matters of IP-enabled Services, E911 Requirements for IP-Enabled Service Providers*, 20 FCC Rcd 10245, 10247 (citing 47 U.S.C. § 151 and *Wireless Communications and Public Safety Act of 1999*, Pub. L. No. 106-81, 113 Stat. 1286, § 2(b) (1999) (911 Act). See also 911 Act, § 2(b).

As set forth in the Federal Trade Commission's March 2011 publication "The Evolving IP Marketplace," "[e]ffective patent remedies are critical to the patent system's incentives to innovate. Patent infringement interferes with a patentee's ability to realize its patent's value in the marketplace."⁴⁰ However, the FTC also notes that:

[i]ncreasing activity by patent assertion entities (PAEs) in the information technology (IT) industry has amplified concerns about the effects of ex post patent transactions on innovation and competition. The business model of PAEs focuses on purchasing and asserting patents against manufacturers already using this technology, rather than developing and transferring technology.⁴¹

This business model is exactly what E911 and NG911 services providers are forced to contend with on an increasingly frequent basis. In fact, PAEs can and do use the Commission's mandatory E911 regulations against compliant carriers and their vendors in an attempt to extract licensing agreements. As a result, to avoid any possible claims of infringement, E911 services providers would be required to (a) monitor and evaluate a burdensomely large number of potential patents in this space to determine whether they should proactively seek out licenses not subject to RAND, take steps to try to invalidate the patents, and/or prepare to defend against potential patent enforcement actions; or (b) invest resources into developing newer and potentially less accurate technology or compliance methods in an effort to avoid the essential patents—which may be impossible. Obviously, the potential cost of proactively seeking out licenses not subject to RAND and/or defending against such patent enforcement actions will ultimately be passed on to consumers in the form of higher priced services. For smaller carriers, such litigious conduct is crippling, and may result in a forced exit from the marketplace.

⁴⁰ FTC Report, at p. 4

⁴¹ *Id.* at 8.

The United States Patent and Trademark Office recently celebrated the issuance of its 8 millionth patent.⁴² The concerns of the current E911 marketplace pale in comparison to the impact of PAE behavior on an NG911 world. The introduction of text, video, telematics, and other technologies into the 911 public safety and homeland security network will touch off a frenzy of patent litigation, as PAEs and other patent holders seek to monetize their intellectual property in this new marketplace. Public safety and homeland security vendors are aware of this problem. The potential financial impact of such litigious activity on this new market will give many such vendors pause before investing to support their clients in response to forthcoming Commission NG911 regulations. This will directly impact the public's safety and security – an unacceptable result, given the Commission's mission.

As the Commission is well aware, an agency may either identify on its own motion a problem such as an industry behavior that adversely affects consumers, or act upon a Petition such as this. In either case, it is now time for the Commission to address the enormous problem relating to the intellectual property issues surrounding the E911 and NG911 regulations.

B. In the Past the Commission Committed to Consider the Effect of Patent Rights on its Regulations

As early as 1961, the Commission announced that in support of its mandates under the Communications Act, in the development of "technical standards and regulations" it is important to give "consideration to the effect of patent rights" upon the process.⁴³ The Commission noted that its "patent policy for a number of years has been to obtain patent information whenever it becomes relevant to a particular proceeding" and expressed the expectation that "whenever it

⁴²http://www.uspto.gov/news/speeches/2011/kappos_patent_8million.jsp"http://www.uspto.gov/news/speeches/2011/kappos_patent_8million.jsp http://www.uspto.gov/news/speeches/2011/kappos_patent_8million.jsp (September 8, 2011)

⁴³ Revised Patent Procedures of the Federal Communications Commission, Public Notice, 3 F.C.C. 2d 26 (December 1961).

appears that the patent structure is or may be such as to indicate obstruction of the service to be provided under the technical standards promulgated by the Commission, this fact will be brought to the Commission's attention for early consideration and appropriate action."⁴⁴

The need for the Commission to consider the effect of patent rights on its regulations and standards is as necessary today with regard to existing E911 and future NG911 regulations as it was fifty-one years ago when the FCC adopted its Revised Patent Procedures. If nothing else, there is an obvious need to clarify the applicability of the 1961 era procedures and determine how to best apply such procedures in connection with the mandatory rules and regulations implemented by the FCC, particularly E911 and future NG911 regulations.

Both the patent structure and Commission's regulations control entry into various markets. As a formal matter, the purpose of patents is to promote scientific and economic progress by awarding potentially lucrative limited-term monopolies in new inventions, while the purpose of the Commission's regulations is to promote public safety, such as in the case of E911 regulations or standardized implementation of new services and technology. As a practical matter, the functions of these two systems are pervasively intertwined and, thus, regulations adopted by the Commission cannot ignore the patents that may be implicated by such regulations.

C. The Commission's Past Consideration of Patents and Specific Regulations

Presumably following its 1961-era patent policy, the Commission has previously acknowledged its responsibilities pertaining to intellectual property rights used of necessity by regulated entities in order to comply with Commission standards and policy, and reasonable and nondiscriminatory approaches to deal with the same. Various past applications of the

⁴⁴ *Id.*

Commission's treatment of intellectual property relating to technical standards and regulations are described below and demonstrate that, while the Commission has not always been actively involved in the patent rights relating to adopted technical standards and regulations, it has addressed the topic and provided guidance for patent holders and communications entities in each scenario.

1. Part 68 Terminal Equipment Registration Program

The Commission made a decision to require a "standard means of connection" of terminal equipment to the network and selected hardware for the standard means of connection.⁴⁵ The Commission indicated that, in adopting the standard plugs and jacks in the rules, "a fundamental basis for adopting the designs as rule-prescribed was that the design advanced as the least expensive, most reliable, and expected to be used most often, happened to have been patented by AT&T" and they were "quite concerned that AT&T not use a patent position on standard plugs and jacks 'as a discriminatory and anticompetitive tool to thwart sales of competitors' equipment.'"⁴⁶ Thus, the Commission "adopted the AT&T-patented design in [the] rules, expressly conditioning this action (and a concomitant waiver of limiting language in the First Report) on representations made by AT&T about the level of royalties which it would require for others to manufacture the AT&T designs" and stated that such action ". . . strikes a reasonable balance between the public interest in standardization of technically and economically beneficial designs, and [the] belief that AT&T should not be able to obtain a

⁴⁵ See e.g. Memorandum Opinion and Order, *In the Matters of Proposals for New or Revised Classes of Interstate and Foreign MTS and WATS etc.*, 70 FCC 2d 1800 (1979).

⁴⁶ *Id.* at 1835.

discriminatory and anticompetitive advantage over its competitors in the supply of telephone equipment through the imposition of royalties."⁴⁷

2. ANSI and Radio Equipment for Public Safety (Docket No. WT 96-86)

The Commission originally subscribed a role to the American National Standards Institute (ANSI)⁴⁸ to set the prices on patent licenses for radio equipment for public safety. When ANSI filed for reconsideration of this role, the Commission agreed that "the alternative of a self-policing policy such as the ANSI patent policy can be structured to protect adequately the rights of both intellectual property right holders and consensus standard users while at the same time encouraging competition," but recognized that the ANSI patent policy, however, may be insufficient to protect all of the parties potentially affected in cases where proprietary intellectual property rights are asserted over technology imbedded in a standard recommended by the NCC.⁴⁹ In particular, under the ANSI patent policy, an American National Standard may include patented technology if technical reasons justify that approach. However, before a standard will be approved, ANSI must receive from the patent holder a statement that the patent holder will either (a) make its technology available without compensation; or (b) license its technology to applicants under reasonable terms and conditions that are demonstrably free of any unfair discrimination.⁵⁰

Thus, the Commission ultimately modified the language of its Order as follows:

. . . proprietary technology may be incorporated in a standard ultimately recommended when the NCC concludes that technical

⁴⁷ *Id.* at 1836.

⁴⁸ www.ansi.org

⁴⁹ First Memorandum Opinion and Order, *In the Matter of the Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010; Establishment of Rules and Requirements for Priority Access Service*, Docket No. WT 96-86 14 FCC Rcd 8059, 8067-68 (1999).

⁵⁰ *Id.* at 8066.

reasons justify its incorporation, however, no intellectual property subject to a licensable proprietary right granted by patent or copyright, where the owner or holder of the right has licensed or expressed an intention to license the technology, may be included in a standard ultimately recommended unless the owner or holder of the right files a statement with the NCC prior to such recommendation which states that the owner or holder will either (a) make its technology available without compensation, or (b) license its technology to applicants under reasonable terms and conditions that are demonstrably free of any unfair discrimination.⁵¹

3. Commercial Mobile Alert Service (CMAS) Order (PS Docket No. 07-287)

In implementing The Worker Adjustment and Retraining Notification Act (WARN ACT), the Commission declined to require the Commercial Mobile Service Alert Advisory Committee participants, even though the Committee's participants recommended otherwise, to provide assurance with regard to licensing only because it concluded that "[t]hese requests are outside the scope of Section 602(a) of the WARN Act".⁵² However, it did state that "[w]e also strongly encourage fair, reasonable, and nondiscriminatory Intellectual Property Rights (IPR) licensing in the context of the CMAS."⁵³

4. DTV Issues, ATSC Standard (Docket No. 87-268)

Members of the ATSC patent pool agreed to reasonable and non-discriminatory (RAND) licensing terms during formation of the ATSC standard. The Commission noted that ". . . licensing of the patents for DTV technology will not be an impediment to the development and

⁵¹ *Id.* at ¶ 8068.

⁵² First Report and Order, *In the Matter of Commercial Mobile Alert System*, 23 FCC Rcd 6144, 6160 (2008). ¶ 38.

⁵³ *Id.*

deployment of DTV products for broadcasters and consumers" and that "adoption of this standard is premised on reasonable and nondiscriminatory licensing of relevant patents" ⁵⁴

"We remain committed to this principle" of reasonable and nondiscriminatory licensing of relevant patents "and if a future problem is brought to our attention, we will consider it and take appropriate action." ⁵⁵ In explaining its position as related to digital television (DTV), the Commission has noted, "[i]n order for DTV to be successfully implemented, the patents on the technology would have to be licensed to other manufacturing companies on reasonable and nondiscriminatory terms...We reiterate that adoption of this standard is premised on reasonable and nondiscriminatory licensing of relevant patents." ⁵⁶

In summary, the Commission has previously recognized and exercised its authority to ensure the availability of intellectual property rights on reasonable terms and conditions whenever an important technological standard for a vital public good was at stake. This is exactly the case with E911 services and will be the case for future NG911 services. No public good is more important than the public's safety and security, as evidenced by the public's reliance on 911. The Commission, via authority and precedent, has the right to prevent abuse of its authority in the enforcement of intellectual property rights that impact 911 services.

D. The Commission Should Invoke 28 U.S.C. § 1498

The Commission should provide guidance as to the applicability of 28 U.S.C. § 1498 in these situations by stating (a) that E911 and NG911 location-based services are in furtherance and fulfillment of a stated Government policy; (b) that it is aware that its stated policy may require application of a patent if an E911 services provider is to comply with FCC regulations;

⁵⁴ Fourth Report and Order, *In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, 11 FCC Rcd 17771, 17794 (1996).

⁵⁵ *Id.*

⁵⁶ *Id.*

and (c) that E911 and NG911 location-based services are used with the authorization and consent of the Government and, as such, the proper forum for licensing patent rights related to mandatory obligations for E911 and future NG911 is the U.S. Court of Claims.⁵⁷ Such guidance would be of enormous value.⁵⁸

As noted previously, 28 U.S.C. § 1498(a) provides in relevant part:

Whenever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, the owner's remedy shall be by action against the United States in the United States Court of Federal Claims for the recovery of his reasonable and entire compensation for such use and manufacture.

...

For the purposes of this section, the use or manufacture of an invention described in and covered by a patent of the United States by a contractor, a subcontractor, or any person, firm, or corporation for the Government and with the authorization or consent of the Government, shall be construed as use or manufacture for the United States.

With regard to the application of the §1498 standards, the Courts have held that "[a] use is 'for the Government' if it is 'in furtherance and fulfillment of a stated Government policy' which serves the Government's interests and which is 'for the Government's benefits.'"⁵⁹ Section 1498 does not require "authorization or consent" to take any specific form.⁶⁰ Moreover,

⁵⁷ See generally *Madey*, 413 F. Supp. 2d at 607.

⁵⁸ See Office of Management and Budget "Final Bulletin for Agency Good Guidance Practices" 72 Fed. Reg. 3432 (January 25, 2007). "Well-designed guidance documents serve many important or even critical functions...Agencies may provide helpful guidance to interpret existing law through an interpretative rule...Guidance documents, used properly, can...increase efficiency, and enhance fairness by providing the public clear notice of the line between permissible and impermissible conduct while ensuring the equal treatment of similarly situated parties."

⁵⁹ *Id.*

⁶⁰ *Id.* at 609.

"authorization or consent" does not require direct communication.⁶¹ The statute may be implicated where the government has impliedly consented to the infringement by demonstrating an awareness of the evidence of the patents that will be necessarily infringed.⁶² Similarly, government authorization can be implied where an entity has to comply with specific requirements set forth in government procedures.⁶³ Consequently, under § 1498 an entity may be found to have acted "for the Government" even though the government did not explicitly direct it to infringe and no formal contract existed with the Government.⁶⁴

Consistent with the case law, §1498 applies in this instance because the FCC has prescribed by regulation the E911 standards upon which the infringement claims are based and has required that wireless carriers and E911 service providers implement them. Furthermore, the implementation of these standards is in furtherance of an important government function—providing E911 emergency services "for the purpose of promoting safety of life and property through the use of wire and radio communication."⁶⁵ The plain language of §1498 unambiguously applies to the Commission's E911 and future NG911 regulations. It has recently been held that "'for the government' means that the use must take place in furtherance of government policy with some benefit accruing to the government."⁶⁶ Such is clearly the case here, given that E911 regulations are in furtherance of the federal government's 911 public safety policies, and the ultimate benefit is shared among Federal and state public safety officials and the public they serve.

⁶¹ *Bereslavsky v. Esso Standard Oil Co.*, 175 F. 2d 148, 150 (4th Cir.1949).

⁶² *Madley*, 413 F. Supp. 2d at 617-618. *See also* Cook at 125.

⁶³ *See TVI Energy Corp. v Blane* 806 F.2d 1057, 1060 (Fed. Cir. 1986) (*e.g.* bidding procedures).

⁶⁴ *Id.*

⁶⁵ 47 U.S.C. § 151.

⁶⁶ *Advanced Software Design Corporation v. Federal Reserve Bank of St. Louis*, No. 07-CV-185, 2007 U.S. Dist. Lexis 83538 at *11 (E.D. Mo. 2007).

The purposeful intertwining of 28 U.S.C. § 1498 and the E911 regulations and future NG911 regulations will not unreasonably inhibit current or future holders of patents relating to E911 or NG911. Nor will such action unduly or inappropriately burden the Commission's purpose and responsibilities with respect to the E911 regulations and future NG911 regulations. In fact, by integrating 28 U.S.C. § 1498 into the E911 regulations and future NG911 regulations, reasonable royalties are preserved for an intellectual property rights holder and the licensing negotiations are theoretically simplified because there is only one convenient forum instead of dozens of separate and expensive causes of action. Furthermore (and perhaps more importantly), compliance with E911 regulations and future NG911 regulations would not be unduly or inappropriately burdened by the potential or actual existence of patents relating to these regulations.

It would be unfortunate for the Commission to fail to act at least in this minimalist fashion in order to ensure that public safety vendors are not unjustly driven from the industry.

E. The Commission Has Authority to Act Under Title I And The NET 911 Act to Require RAND Licensing

In the alternative, as demonstrated above, the Commission has the necessary ancillary authority under Title I to require that current E911 and future NG911 patents be licensed subject to RAND terms and conditions and in the past has required such pricing where necessary to promote important Commission goals. The Commission has broad authority with regard to the provision of E911 services. It is well established that the Commission may exercise its ancillary jurisdiction in situations such as this, where its general jurisdictional grant under Title I covers the subject of the regulations and the regulations are reasonably ancillary to the Commission's

effective performance of its statutorily mandated responsibilities.⁶⁷ The capabilities, systems and methodologies in question are part and parcel of the network elements, features, and processes necessary for compliance with Commission E911 standards—situations very similar to those faced by the FCC in both the DTV and public safety radio cases. Consequently, Commission action regarding the terms of patent licenses is appropriate in order to assure the unobstructed and reliable provision of E911 services.⁶⁸

Additionally, under the NET 911 Act,⁶⁹ the Commission has broad authority to adopt regulations to implement the legislation, the purpose of which is to require "each IP-enabled voice service provider...to provide 911 and E911 service in accordance with Commission existing requirements."⁷⁰ Ensuring that TCS' interconnected VoIP customers have access to the 911 and E911 capabilities that they need is both a critical requirement of the NET 911 and an essential element of the FCC's regulatory regime. The technologies, systems and methodologies that are subject to the assertions of patent infringement are capabilities "typically...required in most local 911 and E911 architectures."⁷¹ Moreover, these capabilities are "necessary for the interconnected VoIP provider to provide E911 service in compliance with the Commission's rules."⁷² They are part and parcel of the network elements, features, processes, and agreements necessary for the provision of E911 service.⁷³

⁶⁷ *Am. Library Ass'n v. FCC*, 406 F.3d 689, 700 (D.C. Cir. 2005).

⁶⁸ This proposal is fair to the putative patent holders because at most they would be entitled to reasonable royalty or license fees. Such fees are defined as the amount that "the parties would probably have agreed on if the plaintiff was willing to grant a license and the defendant wished to obtain one, neither party being compelled to do so, and both parties reasonably endeavoring to reach an agreement." *C.J.S. Patents* § 745.

⁶⁹ New Energy Technologies 911 Improvements Act of 2008, Pub. L. No. 110-823, 122 Stat. 2620 (2008) ("NET 911 Act")

⁷⁰ NET 911 Order at ¶ 3..

⁷¹ *Id.* at ¶ 23.

⁷² *Id.* at ¶ 25.

⁷³ *Id.* at ¶ 27.

The patent holders are entities that own or control these capabilities and are therefore subject to FCC jurisdiction with regard to the rates, terms and conditions of access to these capabilities.⁷⁴ Section 9.7 of the Commission's Rules provides that an owner or controller of a capability that can be used for 911 or E911 service must make that capability available to a requesting interconnected VoIP provider on rates, terms and conditions that are reasonable.⁷⁵ This provision applies to any entity that owns or controls the capabilities and not just to the carriers typically regulated by the Commission.⁷⁶ Consequently, to the extent that capabilities are or could be used for both wireless and VoIP, the Commission has already required—at least with regard to interconnected VoIP—that they be made available at reasonable rates, terms and conditions.

Unfortunately, in the NET 911 Order, the Commission based its test of the reasonableness of proposed pricing in the first instance on whether the E911 capabilities were available to CMRS carriers on similar terms and conditions. However, as the FCC acknowledged, this was only "[o]ne indicia of reasonableness."⁷⁷ Moreover, the Commission never really considered the present situation in which, due to overwhelming litigation (mostly initiated by PAEs), the capabilities so necessary for the provision of E911 services may be simply unavailable to all on a reasonable basis. In this Petition, TCS is asking the Commission to modestly expand its ruling to more generally require that the IPR rights for E911 capabilities must in all instances be licensed on reasonable and non-discriminatory terms as long as the

⁷⁴ *Id.* at ¶¶ 28-34.

⁷⁵ 47 U.S.C. § 9.7. *See also* Net 911 Order. at ¶ 31 ["those rates, terms, and conditions must in *all instances be reasonable*." (Emphasis in original)].

⁷⁶ NET 911 Order at ¶ 28.

⁷⁷ *Id.* at ¶ 31.

capability is for the purpose of providing 911 or E911 service in accordance with the Commission's rules.

Finally, Federal law supports the Commission in development and enforcement of an IPR policy. For example, the National Technology Transfer and Advancement Act (NTTAA) of 1995,⁷⁸ directs all federal government agencies to use, wherever feasible, standards and conformity assessment solutions developed or adopted by voluntary consensus standards bodies in lieu of developing government-unique standards or regulations. The NTTAA also requires government agencies to participate in standards development processes, given that such involvement is in keeping with an agency's mission and budget priorities.

Thus, in the alternative, TCS merely requests at this time that the Commission opine on its involvement in the licensing of essential patents as it has done in the past with regard to other adopted standards, regulations, and the U.S.C. In short, TCS requests that the Commission reaffirm that it has legal authority, both direct and ancillary, to establish licensing requirements for E911 and NG911 patents and that such authority also confers on the Commission the ability to dictate RAND licensing terms.

Conclusion

TCS' request is designed to further the Commission's long-standing public safety and homeland security goals related to E911 and NG911. TCS believes that in addition to imposing E911 and NG911 obligations on communications entities, the Commission must also take the necessary steps to promote cooperative efforts by all involved including state and local governments, PSAP administrators, and E911 services providers, as well as by those entities owning or controlling essential patents. Accordingly, TCS requests the Commission to adopt a

⁷⁸ Pub. L. No. 104-113.

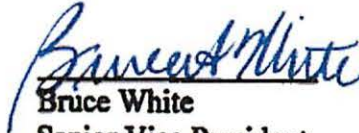
balanced approach to the E911 and future NG911 regulations that takes into consideration the expectations of consumers, the need to strengthen Americans' ability to access public safety in times of crisis, and the needs of entities offering these innovative services.

The Commission has express authority under Title I and the NET 911 Act to craft policies to prevent disruption of 911 services through the manipulation of IP rights by promoting the fair and equitable application of the IP in question. Moreover, there is ample Commission precedent for the exercise of jurisdiction over intellectual property rights as they relate to or impact upon vital Commission policies such as 911 (and, in the future, NG911), and the industry is without a reliable self-regulation in the absence of the Commission's authority. In fact, it is a natural extension of the Commission's responsibility to protect and serve the public interest to invoke 28 U.S.C. § 1498 when an IP holder seeks to use the Commission's 911 regulations as justification for IP rights enforcement.

For the reasons set forth above, TCS respectfully requests that the Commission immediately issue a public notice seeking comment on this Petition.

Respectfully submitted,

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Dated July 24, 2012

Annex A – Proposed Rules

The following new sections to Part 47 of the Code of Federal Regulations are added to read as follows:

47 C.F.R. § 9.7(d):

All intellectual property rights required by entities subject to the provisions of this Section in order to comply with the requirements herein shall be licensed on reasonable terms and conditions that are demonstrably free of any unfair discrimination so long as the rights are used for the purpose of providing 911 or E911 services in accordance with the Commission's rules.

47 C.F.R. § 20.18(n):

All intellectual property rights required by entities subject to the provisions of this Section in order to comply with the requirements herein shall be licensed on reasonable terms and conditions that are demonstrably free of any unfair discrimination so long as the rights are used for the purpose of providing 911 or E911 services in accordance with the Commission's rules.

Exhibit A

Date Filed	Case #	Plaintiff(s)	Defendant(s)	Court	Infringing Action	Patents
3/12/09	6:09cv115	Tendler Cellular of TX	AT&T Mobility Verizon Wireless Sprint Nextel US Cellular T-Mobile	District CT Eastern District of Texas	E911 Services	U.S. Patent No: 508 Patent – Issued 11/4/08 Filed 7/11/07 -Assignee
4/1/09	2:09-cv-00091	EMSAT	Virgin Mobile and Ace Cash Express, Inc., Ztar Mobile, Inc., 7-Eleven, Inc., MGA Entertainment, Inc., Circle K Stores, Inc., GreatCall, Inc., kajeet, Inc., Tracfone Wireless, Inc.	District CT Eastern District of Texas	E911 Services	
1/26/09	3:09-cv-00007	Emsat	US Cellular	District CT Northern District of West Virginia	E911 Services E911 Services E911 Services E911 Services	U.S. Patent Nos: 763 Patent – Issued 10/30/07 Filed 11/22/04 – Assignee, 404 Patent – Issued 11/27/01 Filed 3/21/96 – Assignee, 822 Patent – Issued 1/25/05 Filed 9/15/2000 – Assignee, 965 Patent – Published 1/17/08
10/7/08	2:08CV381	Emsat	MetroPCS Centennial Leap Cricket	District CT Eastern District of Texas	E911 Services E911 Services	U.S. Patent Nos: 763 Patent – Issued 10/30/07 Filed 11/22/04 – Assignee,

Date Filed	Case #	Plaintiff(s)	Defendant(s)	Court	Infringing Action	Patents
					E911 Services E911 Services	611 Patent – Issued 8/31/99 Filed 1/21/96 – Assignee, 822 Patent – Issued 1/25/05 Filed 9/15/2000 - Assignee, 965 Patent – Published 1/17/08
3/31/08	4-08CV-822	Emsat	AT&T Mobility/Cingular	District CT Northern District of Ohio	E911 Services E911 Services E911 Services E911 Services	U.S. Patent Nos: 763 Patent – Issued 10/30/07 Filed 11/22/04 – Assignee, 611 Patent – Issued 8/31/99 Filed 1/21/96 – Assignee, 822 Patent – Issued 1/25/05 Filed 9/15/2000 – Assignee, 404 Patent – Issued 11/27/01 Filed 3/21/96 - Assignee
3/31/08	4:08-cv-821	Emsat	Alltel	District CT Northern District of Ohio		U.S. Patent Nos: 611, 404, 822, 763
3/31/08	4:08-cv-816	Emsat	Verizon	District CT Northern District of Ohio		U.S. Patent Nos: 611, 404, 822, 763
3/31/08	4:08-cv-818	Emsat	Sprint Nextel Boost Mobile Nextel	District CT Northern District of Ohio		U.S. Patent Nos: 611, 404, 822, 763 Jeffrey L. Waters from Jones Day (Atlanta Office) who is one of the listed counsel for Sprint in the ND Ohio case 4:08-cv-818.

Date Filed	Case #	Plaintiff(s)	Defendant(s)	Court	Infringing Action	Patents
3/31/08	4:08-cv817	Emsat	T-Mobile	District CT Northern District of Ohio		U.S. Patent Nos: 611, 404, 822, 763
2/6/07	5:07-CV- 00023	800 Adept	AT&T Mobility Verizon Sprint Nextel T-Mobile	District CT Eastern District of Texas	E911 Services E911 Services	U.S. Patent Nos: 111 Patent – Issued 2/23/99 – Assignee, 689 Patent - Issued 9/8/98 Filed 9/5/96 - Assignee
3/30/2001	5:01cv20291	Zoltar Satellite	Snaptrack Inc. et al.	Disctrict CT Northern District of California	E911 services	U.S. Patent Nos. 5,650,770; 5,963,130; 6,198,390

Date Filed	Case #	Plaintiff(s)	Defendant(s)	Court	Infringing Action	Patents
01/06/2006	5:06-cv-00044	Zoltar Satellite Alarm Systems Inc.	Motorola Inc. LG Electronics Mobile Communications Company LG Electronics Inc Audiovox Communications Corporation UTSTARCOM, INC Utstarcom Personal Communications Sanyo North America Corporation Sanyo Electric Co., Ltd. Palm, Inc. Wherify Wireless, Inc. Sprint Corporation Nokia Inc., Samsung Electronics America, Inc., Samsung Electronics Co., Ltd Samsung Telecommunicatons America LLC	District CT Northern District of California (Transferred from ED Tex)	E911 services	U.S. Patent Nos. 5,650,770; 5,963,130; 6,198,390

Date Filed	Case #	Plaintiff(s)	Defendant(s)	Court	Infringing Action	Patents
07/07/2011	1:11-cv-00598	Mosaid Technologies Inc.	Sony Ericsson Mobile Communications (USA) Inc. HTC America Inc.	U.S. District Court District of Delaware	E911 services	U.S. Patent Nos. 5,650,770; 5,963,130; 6,198,390

Date Filed	Case #	Plaintiff(s)	Defendant(s)	Court	Infringing Action	Patents
02/25/2011	6:11-cv-00096-LED	TracBeam, L.L.C.	AT&T Inc. AT&T Mobility L.L.C. MetroPCS Communications, Inc. MetroPCS Wireless, Inc. Texas RSA 7B3, L.P. D/B/A/ Peoples Wireless Services Sprint Nextel Corporation Sprint Spectrum L.P. Nextel of California, Inc. Nextel Communications of the Mid-Atlantic, Inc. Nextel of New York, Inc. Nextel South Corp. Nextel of Texas, Inc. Nextel West Corp. Cellco Partnership d/b/a Verizon Wireless Google, Inc. Skyhook Wireless, Inc. Telecommunication Systems, Inc.	U.S. District Court Eastern District of TEXAS		U.S. Patent Nos. 7,764,231; 7,525,484
10/06/2010	1:10-cv-06385	Motorola	Apple	United States District Court Northern District of Illinois		U.S. Patent No. 7,751,826 "System and Method for E911 Location Privacy Protection,"

Exhibit D

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

MOSAID TECHNOLOGIES INC.,

Plaintiff,

v.

SONY ERICSSON MOBILE
COMMUNICATIONS (USA), INC. AND HTC
AMERICA, INC.

Defendants.

C.A. No.: _____

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff MOSAID Technologies Inc. ("MOSAID"), by and through its undersigned counsel, for its Complaint for Patent Infringement against the above-named Defendants hereby states:

THE PARTIES

1. Plaintiff MOSAID Technologies Inc. is a corporation subject to the laws of Canada with its principal place of business at 11 Hines Road, Suite 203, Ottawa, Ontario, Canada K2K 2X1. MOSAID's United States principal place of business is located at 5700 Granite Parkway, Suite 960, Plano, Texas 75024.

2. Defendant Sony Ericsson Mobile Communications (USA), Inc. ("SEMC") is a Delaware corporation which may be served through its registered agent, Capitol Services, Inc., at 615 South DuPont Highway, Dover, DE 19901. SEMC is a leading manufacturer of cellular phones in the United States. SEMC is authorized to do business in the State of Delaware, and regularly conducts such business within the State and within this judicial district by way of sales and distribution of said cellular phones.

3. Defendant HTC America, Inc. (“HTC” and collectively with SEMC, “Defendants”) is a Washington corporation. HTC may be served pursuant to the Delaware long arm statute, 10 *Del. C.* § 3104, through its registered agent, National Registered Agents, Inc., 1780 Barnes Blvd. SW, Tumwater, WA 98512-0410. HTC is a leading manufacturer of cellular phones in the United States. HTC is authorized to do business in the State of Delaware, and regularly conducts such business within the State and within this judicial district by way of sales and distribution of cellular phones.

JURISDICTION AND VENUE

4. This is an action for patent infringement arising under the provisions of the Patent Laws of the United States of America, Title 35, United States Code.

5. Subject-matter jurisdiction over MOSAID’s claims is conferred upon this Court by 28 U.S.C. § 1331 (federal question jurisdiction) and 28 U.S.C. § 1338(a) (patent jurisdiction).

6. This Court has personal jurisdiction over Defendants because Defendants are subject to general jurisdiction in the State of Delaware. Defendants also have established minimum contacts with the forum. All Defendants are authorized to do business in the State of Delaware and regularly conduct such business. Defendants manufacture, sell and/or offer to sell products – namely cellular phones (including the infringing phones specified herein) -- that are and have been used, offered for sale, sold and/or purchased in Delaware, including in this judicial district. Defendants—directly and/or through their distribution networks—place their infringing phones within the stream of commerce, which stream is directed at this district. Therefore, the exercise of personal jurisdiction over Defendants would not offend traditional notions of fair play and substantial justice.

7. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b) and (c) and §1400(b).

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 5,650,770

8. MOSAID reasserts and incorporates herein by reference the allegations of all preceding paragraphs of this Complaint as if fully set forth herein.

9. On July 22, 1997, U.S. Patent No. 5,650,770 (“the ‘770 Patent”), a copy of which is attached hereto as “Exhibit A,” was duly and legally issued by the U. S. Patent and Trademark Office (“USPTO”). MOSAID is the owner by assignment of all right, title and interest in and to the ‘770 Patent, including all right to recover for any and all past infringement thereof.

10. Upon information and belief, Defendants have in the past and continue to infringe, directly, indirectly, literally, under the doctrine of equivalents, contributorily, and/or through the inducement of others, one or more of the claims of the ‘770 Patent by making, using, importing, selling and/or offering to sell, in this judicial district and elsewhere in the United States, cellular telephones which are covered by at least one claim of the ‘770 Patent.

11. At a minimum, each of the following cellular phones made, used, sold and/or offered for sale by the Defendants infringe one or more claims of the ‘770 Patent because they each include, among other things, a navigational receiver for providing a location of the phone, with a manually operated switch having an output, at least one switch defining a panic button, and a radio transmitter connected for receiving the location of the phone, at least one switch output, defining a switch status and transmitting the location of the phone and the switch status, an identification circuit for providing a remote identification code, the radio transmitter being adapted for transmitting the identification code, a radio receiver for receiving a command, a transmission power level selection circuit being responsive to the received command for

selecting the transmission power level, a sensor having at least one output signal and defining a sensor status, and a radio transmitter connected for transmitting the location of the phone and the sensor status, where the sensor further comprises a manually operated switch defining a pair of electrical contacts for providing the output signal, and are therefore infringing one or more claims of the '770 Patent:

- a. SEMC Xperia™ X10;
- b. SEMC Xperia™ arc;
- c. SEMC Elm™;
- d. SEMC Naite™;
- d. SEMC Aspen™;
- e. SEMC Xperia™ Play Smartphone;
- f. SEMC Cedar™ Call Phone;
- g. SEMC T715™ Call Phone;
- h. SEMC Xperia™ x10 mini Call Phone;
- i. SEMC Vivaz™ pro Call Phone;
- j. SEMC W518a Call Phone;
- k. SEMC Xperia™ neo smartphone;
- l. SEMC Vivaz™ phone;
- m. HTC EVO 4G;
- n. HTC Tilt™ 2;
- o. HTC Desire™;
- p. HTC Aria™;
- q. HTC Wildfire™;

- r. HTC ThunderBolt™;
- s. HTC Freestyle™;
- t. HTC EVO Shift 4G;
- u. HTC Merge™;
- v. HTC Inspire™ 4G;
- w. HTC Arrive™;
- x. HTC Hero™;
- y. HTC OZONE™;
- z. HTC Dash™ 3G;
- aa. HTC Touch Pro2;
- bb. HTC XV6900;
- cc. HTC Imagio™ Support;
- dd. HTC DROID X2;
- ee. HTC XV6800;
- ff. HTC DROID ERIS;
- gg. HTC Touch™ Diamond;
- hh. HTC myTouch® 3G;
- ii. HTC myTouch® 4G;
- jj. HTC G1™;
- kk. HTC G2™;
- ll. HTC HD2;
- mm. HTC HD7™; and
- nn. HTC myTouch® 3G Slide.

12. Each of the foregoing phones has embedded emergency call features, including the ability to make emergency calls without a SIM card inserted in the phone, or while the phone's SIM card is locked, a GPS receiver that uses satellite signals to calculate the location of the phone, as well as assisted GPS to calculate phone location even more quickly. Each of the foregoing phones transmit GPS-based location information providing the whereabouts of the phone when the phone makes an emergency call.

13. As a consequence of the infringement of the '770 Patent by Defendants, MOSAID is entitled to recovery of past damages in the form of, at a minimum, a reasonable royalty.

14. Upon information and belief, Defendants will continue to infringe the '770 Patent unless enjoined by this Court.

15. As a consequence of the infringement by Defendants complained of herein, MOSAID has been irreparably damaged to an extent not yet determined and will continue to be irreparably damaged by such acts in the future unless Defendants are enjoined by this Court from committing further acts of infringement. In the event the Court determines that it will not enter injunctive relief, then it should require Defendants to continue to pay royalties for their infringement of the '770 Patent on a going-forward basis.

COUNT II – INFRINGEMENT OF U.S. PATENT NO. 6,198,390

16. MOSAID reasserts and incorporates herein by reference the allegations of all preceding paragraphs of this Complaint as if fully set forth herein.

17. On March 6, 2001, U.S. Patent No. 6,198,390 ("the '390 Patent"), a copy of which is attached hereto as "Exhibit B," was duly and legally issued by the USPTO. MOSAID

is the owner by assignment of all right, title and interest in and to the '390 Patent, including all right to recover for any and all past infringement thereof.

18. Upon information and belief, Defendants have in the past and continue to infringe, directly, indirectly, literally, under the doctrine of equivalents, contributorily, and/or through the inducement of others, one or more of the claims of the '390 Patent by making, using, importing, selling and/or offering to sell, in this judicial district and elsewhere in the United States, cellular phones which are covered by at least one claim of the '390 Patent.

19. At a minimum, each of the following phones made, used, sold and/or offered for sale by the Defendants include a navigational receiver for receiving navigation information, a demodulator for demodulating the received navigational information, timing circuits for providing precise time of day information, a manually operated switch defining a panic button and having an output signal defining a switch status wherein operation of a panic button produces a change in the switch status, and a radio transmitter for transmitting the demodulated navigational information, the precise time of day information and the switch status, and are therefore infringing one or more claims of the '390 Patent:

- a. SEMC Xperia™ X10;
- b. SEMC Xperia™ arc;
- c. SEMC Elm™;
- d. SEMC Naite™;
- d. SEMC Aspen™;
- e. SEMC Xperia™ Play Smartphone;
- f. SEMC Cedar™ Call Phone;
- g. SEMC T715™ Call Phone;

- h. SEMC Xperia™ x10 mini Call Phone;
- i. SEMC Vivaz™ pro Call Phone;
- j. SEMC W518a Call Phone;
- k. SEMC Xperia™ neo smartphone;
- l. SEMC Vivaz™ phone;
- m. HTC EVO 4G;
- n. HTC Tilt™ 2;
- o. HTC Desire™;
- p. HTC Aria™;
- q. HTC Wildfire™;
- r. HTC ThunderBolt™;
- s. HTC Freestyle™;
- t. HTC EVO Shift 4G;
- u. HTC Merge™;
- v. HTC Inspire™ 4G;
- w. HTC Arrive™;
- x. HTC Hero™;
- y. HTC OZONE™;
- z. HTC Dash™ 3G;
- aa. HTC Touch Pro2;
- bb. HTC XV6900;
- cc. HTC Imagio™ Support;
- dd. HTC DROID X2;

- ee. HTC XV6800;
- ff. HTC DROID ERIS;
- gg. HTC Touch™ Diamond;
- hh. HTC myTouch® 3G;
- ii. HTC myTouch® 4G;
- jj. HTC G1™;
- kk. HTC G2™;
- ll. HTC HD2;
- mm. HTC HD7™; and
- nn. HTC myTouch® 3G Slide.

20. Each of the foregoing phones has embedded emergency call features, including the ability to make emergency calls without a SIM card inserted in the phone, or while the phone's SIM card is locked, a GPS receiver that uses satellite signals to calculate the location of the phone, as well as assisted GPS to calculate phone location even more quickly. Each of the foregoing phones can calculate the time of day. Each of the foregoing phones also can transmit GPS-based phone location information and time of day information when the phone makes an emergency call.

21. As a consequence of the infringement by Defendants complained of herein, MOSAID is entitled to recovery of past damages in the form of, at a minimum, a reasonable royalty.

22. Upon information and belief, Defendants will continue to infringe the '390 Patent unless enjoined by this Court.

23. As a consequence of the infringement by Defendants complained of herein,

MOSAID has been irreparably damaged to an extent not yet determined and will continue to be irreparably damaged by such acts in the future unless Defendants are enjoined by this Court from committing further acts of infringement. In the event the Court determines that it will not enter injunctive relief, then it should require Defendants to continue to pay royalties for their infringement on a going-forward basis.

COUNT III - INFRINGEMENT OF U.S. PATENT NO. 6,518,889

24. MOSAID reasserts and incorporates herein by reference the allegations of all preceding paragraphs of this Complaint as if fully set forth herein.

25. On February 11, 2003, U.S. Patent No. 6,518,889 (“the ‘889 Patent”), a copy of which is attached hereto as “Exhibit C,” was duly and legally issued by the USPTO. MOSAID is the owner by assignment of all right, title and interest in and to the ‘889 Patent, including all right to recover for any and all past infringement thereof. The ‘770 Patent, ‘390 Patent, and ‘889 Patent are collectively referred to as the “Asserted Patents.”

26. Upon information and belief, Defendants have in the past and continue to infringe, directly, indirectly, literally, under the doctrine of equivalents, contributorily, and/or through the inducement of others, one or more of the claims of the ‘889 Patent by making, using, importing, selling and/or offering to sell, in this judicial district and elsewhere in the United States, cellular phones which are covered by at least one claim of the ‘889 Patent.

27. At a minimum, each of the following phones made, used, sold and/or offered for sale by the Defendants include a navigational receiver for providing a location of the phone, a voice-activated detector having an output signal that becomes active when a predetermined distress phrase is detected, a radio transmitter connected for transmitting the phone location when the output signal becomes active, a sensor having at least one output signal and defining a

sensor status, the radio transmitter also connected for transmitting the sensor status, and therefore infringe one or more claims of the '889 Patent:

- a. SEMC Xperia™ arc;
- b. SEMC Elm™;
- c. SEMC Naite™;
- d. SEMC Aspen™;
- e. SEMC Xperia™ Play Smartphone;
- f. SEMC Cedar™ Call Phone;
- g. SEMC T715™ Call Phone;
- h. SEMC Equinox TM717;
- i. SEMC TM506;
- j. SEMC Xperia™ X10A;
- k. SEMC W518a Call Phone;
- l. SEMC Xperia™ neo smartphone;
- m. HTC EVO 4G;
- n. HTC Merge™;
- o. HTC Inspire™ 4G;
- p. HTC Arrive™;
- q. HTC Hero™;
- r. HTC OZONE™;
- s. HTC Dash™ 3G;
- t. HTC Touch Pro2;
- u. HTC XV6900;

- v. HTC Imagio™ Support;
- w. HTC DROID X2;
- x. HTC XV6800;
- y. HTC DROID ERIS;
- z. HTC Touch™ Diamond;
- aa. HTC myTouch® 3G;
- bb. HTC myTouch® 4G;
- cc. HTC G1™;
- dd. HTC G2™;
- ee. HTC HD2;
- ff. HTC HD7™;
- gg. HTC Surround™; and
- hh. HTC myTouch® 3G Slide.

28. Each of the foregoing phones has embedded emergency call features, including the ability to make emergency calls without a SIM card inserted in the phone, or while the phone's SIM card is locked, a GPS receiver that uses satellite signals to calculate the location of the phone, as well as assisted GPS to calculate phone location even more quickly. Each of the foregoing phones transmit GPS-based location information providing the whereabouts of the phone when the phone makes an emergency call. Each of the foregoing phones is capable of making an emergency call as a result of a voice command to the phone.

29. As a consequence of the infringement by Defendants complained of herein, MOSAID is entitled to recovery of past damages in the form of, at a minimum, a reasonable royalty.

30. Upon information and belief, Defendants will continue to infringe the '889 Patent unless enjoined by this Court.

31. As a consequence of the infringement by Defendants complained of herein, MOSAID has been irreparably damaged to an extent not yet determined and will continue to be irreparably damaged by such acts in the future unless Defendants are enjoined by this Court from committing further acts of infringement. In the event the Court determines that it will not enter injunctive relief, then it should require Defendants to continue to pay royalties for their infringement on a going-forward basis.

PRAYER FOR RELIEF

WHEREFORE, MOSAID prays for entry of judgment and an order that:

- (1) Defendants have infringed one or more of the claims of the Asserted Patents, either literally and/or under the doctrine of equivalents;
- (2) Defendants account for and pay to MOSAID all damages, assessment of interest, and costs of MOSAID caused by Defendants' patent infringement;
- (3) MOSAID be granted permanent injunctive relief pursuant to 35 U.S.C. § 283 enjoining Defendants, their officers, agents, servants, employees, affiliates and those persons in active concert of participation with them from further acts of patent infringement of the Asserted Patents;
- (4) In the event the Court determines that it will not enter injunctive relief, Defendants continue to pay royalties to MOSAID for its infringement of the Asserted Patents on a going-forward basis;
- (5) Defendants account for and pay for increased damages for willful infringement under 35 U.S.C. § 284;

- (6) Costs and attorney's fees be awarded to MOSAID, as this is an exceptional case under 35 U.S.C. § 285; and
- (7) MOSAID be granted such further and additional relief as the Court may deem just and proper under the circumstances.

DEMAND FOR JURY TRIAL

MOSAID demands trial by jury on all claims and issues so triable.

July 7, 2011

BAYARD, P.A.

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Exhibit E

NENA Intellectual Property Rights Policy

I Purpose

NENA requires an explicit Intellectual Property Rights Policy to conduct its daily work. The objectives of this policy are to:

- a. Ensure that Members' and participating Entities' IPR are protected;
- b. Promote awareness of IPR issues among NENA Committees so as to permit informed decision-making about the tradeoffs associated with technical alternatives encountered in committee work; and
- c. Ensure that implementers producing products or services based on NENA standards are not unreasonably inhibited by IPR licensing requirements.

2 Definitions

2.1 Affiliate

An *Affiliate* is any entity, now or hereafter, that is *Controlled* by, under common *Control* with, or that *Controls* a subject party.

2.2 Control

To *Control* an entity is to hold, directly or indirectly, more than 50% of the voting power to elect directors of a corporation, in the case of a corporate entity, or, for any other entity, the power to direct the management of such entity.

2.3 Compliant Portion

A *Compliant Portion* is only those specific portions of a product (hardware, software, service, system, network, operational principle, or any combination(s) thereof) that implement and are compliant with all *Normative Requirements* of a *Deliverable* (as applicable to such portions as are adopted) and that are within its *Scope*.

2.4 Contribution

A *Contribution* is a proposal of or submission to an addition to or modification of a new or existing *Deliverable*, if the proposal or submission is either (a) submitted in writing (including a writing in electronic form), or (b) stated orally. An oral statement is not a *Contribution* unless each of the following four conditions obtains:

- a. It is memorialized with specificity in the meeting minutes;
- b. It is attributed in the meeting minutes to the submitting contributor;
- c. The meeting minutes are promptly provided to and approved by the submitting contributor; and

- d. The submitting contributor does not withdraw its submission in writing within fourteen (14) days of receipt of the written minutes.

2.5 Deliverable

A *Deliverable* is a written output of a NENA Committee. This includes, but is not limited to, reports, information documents, administrative documents, standards, drafts, specifications, software, schema, tables, web pages, slides, emails, or similar materials. All parts of such outputs are *Deliverables* without exception.

2.6 Final Deliverable

A *Final Deliverable* is a *Deliverable* that has been approved by the NENA Board or, for documents that are not subject to Board approval, that has been approved by the last body required by the applicable procedure under which the document was developed.

2.7 Implementer

An *Implementer* is a person or business entity that produces one or more products (hardware, software, service, system, network, operational principle, or any combination thereof) having a *Compliant Portion*.

2.8 IPR

IPR means intellectual property rights, including patents, published and unpublished patent applications, copyrights, trademarks, and trade secret rights, as well as any intellectual property right resembling a member of the foregoing list as such right may exist in a particular jurisdiction.

2.9 Licensing Declaration Form

Licensing Declaration Form means the form in Annex B of this Policy.

2.10 Member

The term *Member* shall have the same meaning as that ascribed to it in the prevailing NENA By-Laws, provided, however, that, any other person or entity that participates in a meeting of a *NENA Committee* shall be deemed to be a *Member* for purposes of Article 3 of this Policy and to any other extent required to impose upon such person or entity all other rights and obligations arising under this Policy, notwithstanding such person's or entity's failure to satisfy the general definition of *Member* ascribed to that term in the NENA By-Laws.

2.11 NENA Board

The *NENA Board* is the board of directors or any successor entity which, under the charter and bylaws of

NENA, has the power to manage and control the operations of the association and to finally approve any *Standard*.

2.12 NENA Committee

A *NENA Committee* includes any assembly of *Members*, including lead teams, committees, sub-committees, working groups, and any other structure or assemblage, convened for the purpose of discussing, debating, proposing, revising, or otherwise working on a *Deliverable*.

2.13 NENA Publication

A *NENA Publication* is a book, pamphlet, periodical, or training document that does not contain any *Normative Requirements* and which is not subject to the regular standards development or review processes of NENA.

2.14 No License

The term *No License* applies to *IPR* that an owner has refused to make available under *RAND* or *RANDz* terms by selecting option three (3) on a *Licensing Declaration Form*.

2.15 Normative Requirements

Normative Requirements are those portions of a *Final Deliverable* that are expressly identified as required for compliance with the *Final Deliverable*, including those portions of an optional or alternative portion of the *Final Deliverable* that are identified as required for compliance with such optional or alternative portion. Portions of a *Final Deliverable*, or of any optional or alternative portion of a *Final Deliverable*, are expressly identified as being required for compliance if they are identified by terms such as “must,” “shall,” “mandatory,” “normative,” or “required.”

2.16 Manuscript

A *Manuscript* is any written matter submitted to NENA for the purpose of incorporation in a *NENA Publication*.

2.17 Manuscript Submission Form

Manuscript Submission Form means the form in Annex D of this Policy.

2.18 Participant

A *Participant* is a *Member* who has attended more than one meeting of a particular *NENA Committee*, as reflected in the committee minutes, and who has not terminated his or her involvement by giving written notice of withdrawal to the committee chair.

2.19 Participating Entity

A *Participating Entity* is any entity, including its affiliates, that employs or *Controls* a *Participant* who participates in a *NENA Committee*.

2.20 Patent Holder

A *Patent Holder* is a *Member* or *Participating Entity* who owns or has effective control of *Patent IPR* in a patent or patent application.

2.21 Patent IPR

The term *Patent IPR* includes claims of an issued patent or pending patent application:

- a. Which is now, or at any time during the term of this *IPR Policy*, owned or licensable by a *Participant* or any of its *Affiliates* without the payment of any royalty or fee to any third party;
- b. For which no technically feasible non-infringing alternative exists as a means to implement the *Normative Requirements* of a *Deliverable*; and
- c. Which is within the *Scope*.

Patent IPR excludes any claims:

- a. Other than those set forth above, even if contained in the same patent or patent application as *Patent IPR*; or
- b. Applicable solely to an implementation of a portion of a *Deliverable* outside the *Scope*.

2.22 Patent Information Form

Patent Information Form means the form in Annex A of this Policy.

2.23 RAND

RAND means worldwide licensing terms and conditions that are reasonable and non-discriminatory but which may be royalty bearing and/or conditioned upon reciprocity.

2.24 RANDz

RANDz means reasonable and non-discriminatory worldwide licensing terms and conditions which may be conditioned upon reciprocity, but which are free from all charges of any kind, including but not limited to royalties, license fees, and execution fees.

2.25 Scope

The *Scope* of a *Deliverable* shall include items disclosed with particularity in the *Deliverable* where the primary purpose of such disclosure is to enable products or systems to interoperate, interconnect, or communicate as described within the *Deliverable*.

As non-exclusive representative examples, disclosed items including architectural and interconnection re-

quirements, protocols, electrical signaling characteristics, register models, communication and network interface protocols, application program interfaces, service provider interfaces, physical dimensions and characteristics, and data structures comprise the *Scope* of a *Deliverable*.

The *Scope* of a *Deliverable* shall not include:

- a. Any technology that may be necessary to develop, design, manufacture, sell, or use any product or portion thereof that complies with a *Deliverable* but is not expressly set forth in that *Deliverable*;
- b. The implementation or use of other published specifications or standards developed elsewhere but referred to in the body of a *Deliverable*;
- c. Any portion of any product or any combination of products or portions of products that are not required for compliance with the *Deliverable*;
- d. Any implementation examples contained in the *Deliverable*, unless the *Deliverable* expressly states that such implementation examples are within the *Scope* and subject to *RAND*, *RANDz*, or *No License* terms, as applicable.

2.26 Standard

A *Standard* is a *Deliverable* that specifies *Normative Requirements* for a technical or operational matter and which requires approval of the *NENA Board* to become a *Final Deliverable*.

2.27 Stable Form Notice

A *Stable Form Notice* is a written communication (whether physical or electronic) advising *Participants* of the obligation to file with the Committee Resource Manager a *Licensing Declaration Form* covering a particular *Deliverable*.

2.28 Submitter

For a given *Contribution*, the term *Submitter* includes the *Participant* who makes the *Contribution*, along with any *Participating Entity* who employs or Controls the *Participant*.

3 Consideration

As partial consideration for admission to or renewal of membership in NENA and for the right of a *Member* or *Participating Entity* to participate in the work of a *NENA Committee*, each *Member* or *Participating Entity* agrees to be bound by the terms of this *IPR Policy* whether or not the right to participate is exercised.

4 Patent IPR

4.1 Coverage

This Article covers *Deliverables* created by or contributed to NENA Committees, and applies to *Members*, *Participants*, *Participating Entities*, and *Submitters*.

4.2 General Rules

The terms as designated in a *Licensing Declaration Form* under which *IPR* is offered to *Members* (e.g. *RAND*, *RANDz* or *No License*) may be considered by *NENA Committees* in determining whether to incorporate such *IPR* in a *Deliverable*. No *Member* or *Participating Entity* shall have an obligation to offer its own *IPR* for use by any other party.

4.3 Disclosure of Patent IPR

4.3.1 Obligations to Disclose

4.3.1.1 For Members Acting in an Individual Capacity

Each *Member* who is a *Participant* in a *NENA Committee* in an individual capacity shall disclose all *Patent IPRs* which he or she owns or controls and which are within the *Scope* of a *Deliverable*, or which would come within the scope of a *Deliverable* if a particular *Contribution* were accepted.

4.3.1.2 For Members Participating on Behalf of a Participating Entity

A *Member* who is a *Participant* on behalf of a *Participating Entity* shall disclose all *Patent IPRs* owned or controlled by that *Participating Entity* of which the *Member* is personally aware and which are within the *Scope* of a *Deliverable*, or which would come within the scope of a *Deliverable* if a particular *Contribution* were accepted. A *Member's* personal awareness includes the *Member's* actual knowledge as well as whatever additional information the *Member* may obtain following good-faith consultation between the *Member* and any other employee, agent, or attorney of the *Participating Entity* known by the *Member* to be familiar with the patent position of the *Participating Entity* and its *Affiliates*, such as the *Participating Entity's* patent attorney. A *Member* is encouraged to disclose other *Patent IPR* of which the *Member* is aware, including that of third parties, which the *Member* believes to be within the *Scope* of a *Deliverable*, or which the *Member* believes would come within the scope of a *Deliverable* if a particular *Contribution* were accepted.

4.3.2 Requests for Disclosure by Non-Participants

Any *Participant* may request that the Committee Resource Manager submit a request to any entity identified by such *Participant* for such entity to complete and sub-

mit a *Patent Information Form* with respect to a particular *Deliverable* and, if applicable, a *License Declaration Form*. *Members* are required to respond by either filling in a *License Declaration Form*, or if the *Member* believes neither he or she nor any *Participating Entity* on behalf of which he or she is participating holds applicable *IPR*, by filing a *Patent Information Form* with the Committee Resource Manager. The Committee Resource Manager shall not disclose the name or affiliation of the requesting party, and no *Member* or third party shall have any right to request or receive such information.

4.3.3 No Patent Search Required

Neither the disclosure obligations imposed by sections 4.3.1.1 and 4.3.1.2 nor the consultation obligation imposed by section 4.3.1.2 shall oblige a *Member* or *Participating Entity* to conduct patent or patent application searches; nor shall the obligation of good-faith consultation with knowledgeable individuals under section 4.3.1.2 be construed to impose a standard of diligence.

4.3.4 Timeliness

A *Member* under an obligation to disclose *Patent IPR* shall do so as soon as practical during the process of creating a *Deliverable*. Verbal disclosure of *Patent IPR* shall be sufficient as an initial matter, and all such disclosures shall be recorded in the minutes of the meeting at which they are made. Verbal disclosure does not relieve a *Member* from the obligation to formally disclose *Patent IPR* using the *Patent Information Form* after making any *Contribution* which would, if adopted, place the *Patent IPR* within the *Scope* of the *Deliverable*.

4.3.5 Patent Information Form

A *Member* must disclose *Patent IPR* by completing a *Patent Information Form* and submitting that form to the committee's Secretary. A *Member* or *Patent Holder* may submit a *Licensing Declaration Form* covering "All *Patent IPRs*" or "All *Patent IPRs* not otherwise disclosed," in lieu of listing individual *Patent IPRs*. The Secretary shall forward all such disclosures to the Chairperson of the committee and to the Committee Resource Manager. The Committee Resource Manager shall log all disclosures, attach them to the committee's meeting reports, and post them to the Committee Management Website.

4.4 Licensing Declaration Procedures

4.4.1 Disclosure at NENA Committee Meetings

At each meeting of a *NENA Committee*, whether held in-person, by teleconference, or by correspondence, the chairperson or the chair's designee shall ask whether anyone has knowledge of *Patent IPR* within the *Scope* of any

Deliverable(s) or which would come within the *Scope* of any *Deliverable(s)* if any *Contribution(s)* pending before the committee were accepted. The fact that this question was asked shall be recorded in the meeting minutes along with the names, affiliations, and disclosed *Patent IPR* stated by those responding in the affirmative.

4.4.2 Disclosure During Review Period

When any *Deliverable* is in stable form, but before it undergoes review by the NENA Standards Advisory Council, the Committee Resource Manager shall send a *Stable Form Notice* to the *Participants* in the relevant committee giving notice of a deadline, at least sixty (60) days from the date of the announcement, by which all *Patent Holders* with respect to the *Deliverable* must submit a completed copy of the *Licensing Declaration Form* in Annex B to the Committee Resource Manager. All *Stable Form Notices* shall also be posted to the Committee Management Website.

4.4.3 Licensing Declaration Form Options

The terms offered in a *Licensing Declaration Form* shall be chosen from the following three types:

- Non-discriminatory licenses on reasonable terms and conditions (*RAND*);
- Royalty-free, non-discriminatory licenses on reasonable terms and conditions (*RANDz*); or
- A refusal to license under either of the preceding types of terms (*No License*).

Only one type of licensing terms shall be selected on a single *Licensing Declaration Form*. A *Member* or *Participating Entity* who is obliged to disclose multiple *Patent IPRs* and who wishes to offer different *Patent IPRs* under different enumerated terms types must submit a separate *Licensing Declaration Form* for each terms type listing the *Patent IPRs* to be licensed under the indicated terms type. A *Member* or *Patent Holder* may submit a *Licensing Declaration Form* covering "All *Patent IPRs*" or "All *Patent IPRs* not otherwise declared," in lieu of listing individual *Patent IPRs*.

4.4.4 Negotiation of *RAND* or *RANDz* Terms

Detailed negotiations concerning the specific terms of licensing agreements for *Patent IPRs* are left to the parties concerned and will be conducted outside *NENA Committee* processes. In no event, however, shall any agreement vary the requirements of the *RAND* or *RANDz* definitions for *Patent IPRs* that have been listed on a *Licensing Declaration Form* specifying those terms.

4.4.5 Negotiation of *RAND* or *RANDz* Terms in NENA Forum Prohibited

Parties negotiating terms under a *RAND* or *RANDz* declaration shall undertake all such negotiations in a forum

other than the meetings or conferences of *NENA Committees*. No discussion of license terms shall be permitted during committee meetings, conference calls, or via group email or collaboration systems. All such discussions shall take place between the owner(s) of the subject *Patent IPR* and each individual license applicant.

4.4.6 Obligation to Grant Licenses

By completing a *Licensing Declaration Form* and selecting *RAND* or *RANDz* terms, a *Patent Holder* or *Member* commits to offer the *Patent IPR* referred to thereon under the specified terms to any lawful entity that requests a license for the purpose of manufacturing, using, or offering for sale any product that includes a *Compliant Portion* under the *Normative Requirements* of the standard for which the *Licensing Declaration Form* was completed.

4.4.6.1 Term and Survival

The terms upon which a *Patent Holder* commits to offer disclosed *Patent IPR* shall be binding, in accordance with section 4.4.3, until the expiration of the rights disclosed, regardless of any termination of business, withdrawal from NENA, or change of ownership of the *Patent IPRs* or of the *Patent Holder*.

The obligation to grant licenses for declared *Patent IPR* shall survive the termination of a *Participant's* participation with respect to the following:

- a. Any *Patent IPR* in a *Deliverable* that became a *Final Deliverable* prior to the effective date the *Participant's* termination of participation in the relevant *NENA Committee*; and
- b. Any *Patent IPR* included in a *Deliverable* by virtue of a *Contribution* for which the terminating *Participant* was a *Submitter* and which is incorporated in the *Final Deliverable* after the effective date of the *Participant's* termination of participation in the relevant *NENA Committee*.

4.4.7 Effect of No License Declaration

If a *Patent Holder* (or *Member* or third party to whom a disclosure request has been delivered) selects the *No License* term type, the approval reviews (e.g., all-committee, public comment, *NENA Board*) of the subject *Deliverable* shall be halted. A *No License* halt shall end when one of the following four conditions obtains:

- a. The *Submitter* withdraws the *Contribution* that contains the *Patent IPR* subject to a *No License* declaration;
- b. The *Patent Holder* submits a new *License Declaration Form*, rescinding the *No License* declaration and offering the *Patent IPR* under *RAND* or *RANDz* terms;
- c. The authoring committee withdraws the *Deliverable* from the approval process; or

- d. The *NENA Board*, after consultation with counsel, approves the inclusion of the *Patent IPR* covered by the *No License* declaration.

5 Copyrights

5.1 Coverage

This Article covers *Contributions* created by or submitted to *NENA Committees* and applies to *Members*, *Participants*, *Participating Entities*, and *Submitters*.

5.2 Grant of Rights and Permissions

A *Submitter* making a *Contribution* retains copyright to the *Contribution* and may use it for such purposes as the *Submitter* may desire. However, by making a *Contribution*, all *Submitters* grant to NENA an irrevocable, worldwide, perpetual, royalty-free, nontransferable, nonexclusive copyright license to (1) reproduce, modify and distribute (in any and all print, electronic or other means of reproduction, storage or transmission) its *Contributions* for the purpose of developing and publishing *Deliverables*, and (2) upon release of a *Final Deliverable* a license to NENA to sublicense to any and all *Implementers* of the *Final Deliverable* the right to reproduce, distribute, make derivative works (in certain limited instances to be defined by NENA) and display such *Final Deliverable* as reasonably necessary to implement such *Final Deliverable*.

5.3 Patent Rights Not Granted

Nothing in this Article shall imply or be construed to grant NENA rights in any *Patent IPR* related to copyrighted works subject to this agreement.

5.4 Representations and Warranties

By making a *Contribution*, a *Submitter* represents and warrants that, to the extent personally known to the *Submitter* and any *Participant(s)* under the *Submitter's Control*:

- a. The *Submitter* owns or *Controls* the copyright in the contents of its *Contribution* and any part thereof;
- b. The *Submitter* has the right to make the grants, acknowledgements, and agreements required by this policy;
- c. No information in the *Contribution* is confidential or otherwise subject to a license or other encumbrance that conflicts with or supersedes the rights granted to NENA under this Policy, and NENA may freely disclose any and all information in the *Contribution* any third party or parties without limitation;
- d. The *Contribution*, if incorporated into a *Deliverable*, will not subject the *Deliverable* or implementations of the *Deliverable*, in whole or in part, to licensing obligations, restrictions, or requirements that are incon-

sistent with those set forth in this agreement, such as, without limitation, obligations, restrictions or requirements set forth by the General Public License (GPL).

5.5 Copyright In & Notice On Software Code

When a *Deliverable* contains software code, NENA will provide users of the *Deliverable* a free copyright license for the limited purpose of implementing, selling, making, and using products conforming with the *Normative Requirements* of the *Deliverable*. Any such copyright license, however, shall not imply or be construed to convey rights in any *Patent IPR*. All software code contained in a *Deliverable* will be provided on an “AS IS” basis only, and, to the maximum extent permitted by applicable law, NENA, NENA’s *Members*, all *Participating Entities* and the authors and developers of such software will, and do hereby, disclaim all other warranties and conditions, express, implied, or statutory, including, but not limited to, any implied warranties, duties, or conditions of merchantability, of fitness for a particular purpose, of accuracy or completeness of responses, of results, of workmanlike effort, of lack of viruses or malicious code, or lack of negligence. Finally, NENA shall include a notice of the above disclaimers with all software code contained in a *Deliverable*.

5.6 Special Conditions for *Manuscripts*

Notwithstanding the general provisions of this Article, NENA may condition the acceptance of *Manuscripts*, or portions thereof, on the assignment of copyrights in the submitted material and the disclosure of certain interests of the *Submitter(s)*.

5.6.1 *Manuscript* Submission

When a *Submitter* proposes a *Manuscript* for inclusion in a *NENA Publication*, the *Submitter* shall complete a *Manuscript Submission Form* and include that form along with the *Manuscript*. NENA may refuse to accept any *Manuscript* that is not accompanied by the required form.

5.6.2 Extended Projects

When a *Submitter* is a *Participant* in a project to develop, update, revise, or otherwise work on a *NENA Publication* that requires multiple submissions over an extended period of time, the *Submitter* may submit a single *Manuscript Submission Form* and *Multiplicity of Interest Form* covering all *Manuscripts* submitted prior to the approval of the project *Deliverable*. The Committee Resource Manager or the NENA Staff member responsible for the *NENA Committee* developing the relevant *NENA Publication* shall receive and file all such forms.

5.6.3 Multiplicity of Interest – Disclosure Required

It is a condition precedent of acceptance of a *Manuscript* for inclusion in a *NENA Publication* that each *Submitter* of the *Manuscript* disclose certain information that bears on the *Submitter’s* multiplicity of interests. Specifically, the following relationships of each *Submitter*, and any immediate family member thereof, must be disclosed:

- The name and nature of all employers.
- Membership on the board of directors or any fiduciary relationship with another organization.
- Membership on a technical or operational advisory panel or other standing operational/technical committees of another organization.
- Direct ownership or control of shares of stock in a corporation.
- Consultative or advisory arrangements for which monetary compensation is received.
- Grants or research support from a company or organization whose products or services are directly related to the subject matter of a *Manuscript*.

In addition, while it is not possible to list all categories, conditions, or circumstances that may give rise to a multiplicity of interest, a reasonable test to determine whether a multiplicity exists is to ask whether any particular affiliation or interest could cause embarrassment to NENA, or to the individual or institution involved, or lead to questions about an individual’s motives, if such affiliations were made known to the public. If the answer to that question is “yes,” a multiplicity of interest exists and must be disclosed.

If a *Manuscript* is accepted for publication notwithstanding the existence of a multiplicity of interest, each *Submitter* consents to the identification of that multiplicity alongside the published version of the *Manuscript*.

6 Trademarks

6.1 Duties of the *NENA Board*

In the event that NENA proposes to adopt any name, dress, or logo as a trademark, certification mark, trade dress, or trade name (collectively, “trademarks”) to identify, distinguish, or promote any *Standard* or products that conform to the *Normative Requirements* of a *Standard* (or part(s) thereof, if such partial conformance is explicitly permitted by the *Standard*), the *NENA Board* shall take the following steps:

- a. It shall notify the *Members* in writing (electronic writings being deemed sufficient) at least forty-five (45) days prior to the date on which it plans to vote to adopt the mark as a trademark of NENA;

- b. It shall take all steps it deems necessary and proper, in its sole discretion, to protect NENA's rights under such trademarks as it adopts for use by NENA;
- c. It shall establish and disseminate reasonable conditions and procedures for the licensing and use of such trademarks, which conditions and procedures shall be demonstrably free of any unfair discrimination among *Members*.

6.2 Waiver of Recourse

Each *Member* and *Participating Entity* agrees that, unless it provides written notice to the *NENA Board* challenging a proposed mark prior to a vote on adoption of that mark under this Article, then neither the *Participant*, *Participating Entity*, nor any of its/their *Affiliates* shall assert against NENA or any *Member* any trademark or trade name rights they may have or thereafter possess in the proposed trademark. Further, each *Participant* and *Participating Entity* and their *Affiliates*, if any, agrees not to use or adopt any trademarks for any product, service, guideline, specification, or standard likely to cause confusion with or dilute the value of any of the trademarks adopted by NENA, unless such use or adoption has been previously approved and agreed to by the *NENA Board*.

7 Antitrust

7.1 General Policy

The National Emergency Number Association (NENA) assigns the highest priority to full compliance with both the letter and the spirit of the antitrust laws, and it is vital that meetings of *NENA Committees* be conducted in a manner consistent with this policy. If at any time during the course of a meeting the committee leadership or NENA staff, if present, believes that a sensitive topic under the antitrust laws is being discussed, or is about to be discussed, they will so advise the meeting and halt further discussion. As attendees at a meeting, a *Member* or *Participating Entity* likewise should not hesitate to voice any concerns in this regard.

It is important to bear in mind that those in attendance at a meeting may be one's competitors. *NENA Members* and *Participants* should avoid discussing certain subjects when they are together – both at formal NENA meetings and in informal contacts with others – and should adhere strictly to the guidelines that follow. In general, the types of discussion that should be avoided are those that may suggest or tend to reflect agreements among competitors as to: price; terms of sale that could impact price; allocation of customers, markets, or terri-

tories; bid-rigging; and boycotts or joint refusals to do business with others.

While many of the antitrust laws apply only to "concerted" action or "agreements," an illegal agreement can be found even without a "handshake" or express words or writings indicating agreement. Tacit understandings, including responding to pressure, exerting pressure or doing "what is expected," can be sufficient. An implied agreement also may be inferred from actions or the result of those actions. For example, if two competitors discuss prices, and later adopt prices that are similar, a conspiracy to fix prices may be inferred, even though the competitors never explicitly "agreed" to do anything. Comments made in an informal environment may be used as proof of an agreement, even though the parties' subsequent actions actually were taken independently for sound business reasons. Thus, the safest rule of thumb is to avoid any discussions with competitors of topics, in association meetings or elsewhere, on which it would be illegal to agree. An informal verbal understanding could violate the antitrust laws. It is possible to break the law without a written contract or express agreement.

The antitrust laws apply to membership organizations such as NENA just as they apply to any individual company or group of competitors. *Members* and *Participants* should always avoid conduct that would violate the antitrust laws in the ordinary course of business. As such, with rare exceptions that should be made only upon the advice of NENA counsel, there should never be discussion of the following topics at any NENA meeting (whether as part of a structured formal meeting of the association or as part of informal discussions among members at social functions or other events):

- any cooperative's or company's prices or pricing policies;
- terms of sale, warranties or contract provisions;
- division of customers, territories or locations;
- restrictions on or reductions of a cooperative's or company's business activities;
- specific R&D, sales or marketing plans;
- any cooperative's or company's confidential product, product development or production strategies;
- whether to purchase from certain suppliers or sell to certain customers;
- prices paid to input sources;
- complaints about individual firms or other actions that might tend to hinder a competitor from competing fully in any market (with some exceptions in the public policy context);

- data concerning fees, prices, production, sales, bids, costs, salaries, customer credit or other business practices, unless the data in question is exchanged and disclosed pursuant to a well-considered plan that has been approved by NENA counsel.

All NENA meeting attendees have an obligation to terminate any discussion or activity, seek the advice of legal counsel, or, if necessary, terminate any meeting if the discussion or activities conducted therein might be construed to raise any antitrust issues. If serious antitrust concerns are left unaddressed, a *Member* or *Participant* should announce his or her departure, explain why, and withdraw from the meeting.

NENA is committed to complying fully with the antitrust laws.

7.2 Notice at Meetings of NENA Committees

At the commencement of the first meeting of a *NENA Committee* held during a calendar year, and during the opening session of any conference held for the purpose of discussing, debating, proposing, revising, or otherwise working one or more *Deliverables*, the Chairman, Working Group Leader, Committee Resource Manager, Conference Emcee, or a designee of any of the foregoing shall read the following statement, in its entirety:

On behalf of the National Emergency Number Association, I welcome you to this meeting. It is essential that we observe certain ground rules as we participate in this meeting. Antitrust laws of the United States prohibit the discussion of a number of matters in a meeting such as this. It is important that discussions at this meeting address only that information needed for legitimate functioning of NENA and the <insert committee or working group name here>. Relative to any company or companies represented by any of us, there can be no discussion of: prices; terms and conditions such as credit terms, markups, or profits; geographical areas in which a company or companies seek or may seek to do business; the persons or companies with whom a company or companies will or will not do business; production costs; or any future marketing plans. Any departure from these ground rules could result in severe civil and criminal penalties to you as individuals and/or to your companies. Federal sentencing

guidelines mandate jail sentences for antitrust violations and call for criminal fines that may range into the millions of dollars. NENA is committed to complying with federal antitrust regulations. Before participating in this meeting, you are encouraged to familiarize yourself with NENA's complete Intellectual Property Rights and Antitrust policies, available at www.nena.org/ipr. It is a condition of your participation in this committee that you accept the terms of the NENA IPR Policy. If you do not accept these terms, please leave the meeting at this time.

The fact that this statement was read shall be recorded in the meeting minutes or conference proceedings, respectively.

At subsequent meetings of *NENA Committees* or during ensuing conference sessions, the Chairman, Working Group Leader, Committee Resource Manager, or Conference Session Owner shall ask whether anyone present has not received or does not agree to this IPR Policy, and, after offering any person responding in the affirmative an opportunity to withdraw from the meeting or conference, shall record the fact that the question was asked, along with the name and affiliation of any person responding in the affirmative, in the minutes of the meeting or the proceedings of the conference session.

7.2.1 Exceptions

Notwithstanding the provisions of Section 7.2, *supra*, the Antitrust Notice need not be read at meetings of subordinate bodies such as sub-committees or working groups if the following three conditions obtain:

- a. the notice is printed prominently on the agenda of a meeting and the agenda is provided to all members of the subordinate body at least 24 hours in advance of the meeting's scheduled start time;
- b. the notice is verbally recognized by the Chair of the subordinate body or presiding officer at the commencement of the meeting; and
- c. non-consenting *Participants* are given an opportunity to reject this policy and leave the meeting.

When this procedure is used by a subordinate body, that body shall record the fact that the Chair called attention to the notice and provided an opportunity for non-consenting participants to reject the policy and leave the meeting in its minutes.

7.3 Obligation to Report Violations

If a *Member* believes that a discussion at a meeting of a *NENA Committee* would violate the policy described above or the antitrust laws of the United States (or of any foreign state which could reasonably claim jurisdiction over one or more *Members* participating in the meeting) then such *Member* shall:

1. Declare and be identified as an objector to the discussion or activity in question.
2. Immediately disassociate him or her self from the discussion and withdraw from the meeting.
3. Report her or his objection to the Chair of the relevant *NENA Committee* and to one or more of the appointees to the Development Steering Council.

The fact that a *Member* stated an objection and withdrew from a meeting shall be recorded in the meeting minutes.

7.4 Consultation Recommended

NENA encourages all *Members* to familiarize themselves with this antitrust statement and consider discussing their participation in a *NENA Committee* with counsel if, by virtue of their participation, a corporation or other business entity might meet the definition of a *Participating Entity*.

8 Communications to Members

Upon approval by the *NENA Board*, a copy of this policy shall be sent to all *Members*, and, in the future, shall be included in the *Member* registration package for all new *Members*. Further, this policy shall be posted on the NENA website at www.nena.org/ipr, and the *NENA Board* shall establish mechanisms whereby all existing and new members must, as a condition of membership, acknowledge and agree to be bound by the terms of this Policy.

Patent Information Form

Background

This form provides NENA with information about the IPR status of techniques used in or proposed for incorporation in a *Deliverable* as that term is defined in the NENA Intellectual Property Rights ("IPR") Policy, available at www.nena.org/ipr. This form **must** accompany all *Contributio*. Anyone with knowledge of any granted or pending patents affecting the use of NENA *Deliverables*, of their own or of any other entity ("third parties"), is strongly encouraged to submit this form as well.

This information will be maintained in an "IPR List" during the progress of work by a *NENA Committee*, on a best-effort basis. If a given technical proposal is not incorporated in a *Deliverable*, the relevant patent information will be removed from the IPR List. The intent is that NENA experts know in advance of any patent issues with particular proposals or techniques, so that these may be addressed well before a standard reaches final approval.

This *Patent Information Form* is provided to NENA for information only, on a best-effort, good faith basis. No patent search is required. Submit corrected or updated forms if your knowledge or situation changes.

Return this form to the Committee Resource Manager via email (preferred) at crm@nena.org or fax at 202.618.6370.

Disclosing Party Information

Form Submitted by
Address (Line 1)

Address (Line 2)

City

State

Country

Post Code

Contact Person

Telephone

Fax

Email

Place of Submission

Date of Submission

Contribution Information

Submitter

Title

Control Number

Disclosure – Submitting Organization or Person

Check one:

- ☐ The *Submitter* is not aware of having any granted or pending patents associated with the content of the *Deliverable* or *Contribution*.

– OR –

The *Submitter* has granted or pending patents associated with the content of the *Deliverable* or *Contribution*, and:

- ☐ In the event the *Submitter's Patent IPRs* are fully or partly included in the *Deliverable*, the *Patent Holder* is prepared to grant – on the basis of reciprocity for the *Deliverable* listed above – a royalty-free license to any *Implementer* of a *Standard* that results from the *Deliverable* on a world-wide, non-discriminatory basis and on reasonable terms and conditions to manufacture, use, and/or sell *Compliant Portions* (as defined in the NENA IPR Policy) of the above *Deliverable (RANDz)*, and a *Licensing Declaration Form* will be submitted per the NENA IPR Policy.
- ☐ In the event the *Submitter's Patent IPRs* are fully or partly included in the *Deliverable*, the *Patent Holder* is prepared to grant – on the basis of reciprocity for the *Deliverable* listed above – a license to *Implementer* of a *Standard* that results from the *Deliverable* on a world-wide, non-discriminatory basis on reasonable terms and conditions to manufacture, use, and/or sell *Compliant Portions* (as defined in the NENA IPR Policy) of the above *Deliverable (RAND)*, and a *Licensing Declaration Form* will be submitted per the NENA IPR Policy.
- ☐ The *Patent Holder* is unwilling to grant licenses according to the *RANDz* or *RAND* provisions above (*No License*), and discloses the following mandatory information:

Patent Registration/Application Numbers

Portion(s) of *Deliverable* affected

Description of IPRs covering the *Deliverable*

Patent Information Form

Third-Party Patent Information

Complete this section based on your best knowledge of relevant patents granted, pending, or planned by other people or by organizations other than your own.

Check **one**:

☐ The *Submitter* of the *Contribution* is not aware of any granted, pending, or planned patents held by third parties associated with the content of the *Deliverable* or *Contribution*.

– OR –

☐ The *Submitter* of the *Contribution* believes that third parties may have granted, pending, or planned patents associated with the content of the *Deliverable* or *Contribution*, and provides the information below to assist NENA in contacting the identified third parties to obtain more information.

☐ The provider of this *Patent Information Form* is not the *Submitter* of the *Contribution*, but believes third parties may have granted, pending, or planned patents associated with the content of the *Deliverable* or *Contribution*, and provides the information below to assist NENA in contacting the identified third parties to obtain more information.

3rd Party Name(s)

Address (Line 1)

Address (Line 2)

City

State

Country

Post Code

Contact Person

Telephone

Fax

Email

Patent Number/Status

Inventor/Assignee

Relevance to *Deliverable*
or *Contribution*

Licensing Declaration Form

Background

The NENA Intellectual Property Rights ("IPR") Policy, available at www.nena.org/ipr, requires all *Participants* in a *NENA Committee* to complete this *Licensing Declaration Form* within sixty (60) days after receiving a *Stable Form Notice* for a particular *Deliverable*.

This declaration **does not** represent an implied license grant. *Members* and *Participating Entities* are advised that the NENA IPR Policy prohibits the discussion of licensing terms, conditions, prices, and certain other matters in a NENA forum. Further information is available in the Anti-trust section of the NENA IPR Policy.

Patent Holder Information

Legal Name _____
 Licensing Contact _____
 Contact Department _____
 Address (Line 1) _____

 Address (Line 2) _____

 City _____
 State _____
 Country _____
 Post Code _____
 Contact Person _____
 Telephone _____
 Fax _____
 Email _____
 (Optional) URL _____
 Date of Submission _____

Deliverable Information

Title _____

 Document Number _____

Licensing Declaration

By signing and submitting this *Patent Licensing Form*, the *Patent Holder* represents that he, she, or it holds *Patent IPRs* whose use he, she, or it believes would be required to implement the above *Deliverable* and hereby declares, in accordance with the NENA IPR Policy that, with respect to the *Patent IPRs* listed below:

(Check **one**.)

- ☐ In the event the *Patent Holder's Patent IPRs* are fully or partly included in the *Deliverable*, the *Patent Holder* is prepared to grant – on the basis of reciprocity for the *Deliverable* listed above – a royalty-free license to any *Implementer* of a *Standard* that results from the *Deliverable* on a world-wide, non-discriminatory basis and on reasonable terms and conditions to manufacture, use, and/or sell *Compliant Portions* (as defined in the NENA IPR Policy) of the above *Deliverable (RANDz)*.
- ☐ In the event the *Patent Holder's Patent IPRs* are fully or partly included in the *Deliverable*, the *Patent Holder* is prepared to grant – on the basis of reciprocity for the *Deliverable* listed above – a license to any *Implementer* of a *Standard* that results from the *Deliverable* on a world-wide, non-discriminatory basis on reasonable terms and conditions to manufacture, use, and/or sell *Compliant Portions* (as defined in the NENA IPR Policy) of the above *Deliverable (RAND)*.
- ☐ The *Patent Holder* is unwilling to grant licenses according to the *RANDz* or *RAND* provisions above (*No License*).

Declarant Information

Authorized Person _____
 Title _____
 Department _____
 Signature _____

Reg. No.	Country	Title	Inventor	Assignee	Status	§ / Page Affected
1						
2						
3						
4						
5						
6						
7						

Stable Form Notice

Background

The NENA Intellectual Property Rights (“IPR”) Policy, available at www.nena.org/ipr, requires *Participants* in *NENA Committees* to disclose certain *Patent IPRs* during the process of developing a *Deliverable* such as a Technical or Operations Standard Document (i.e., any *Standard*). After receiving this notice, all *Patent Holders* have 60 days in which to submit a *Licensing Declaration Form*.

Notice

The *Deliverable* listed below has reached stable form and will be submitted to the NENA Standards Advisory Council in 60 days. Any and all *Participants* who hold *Patent IPRs* which may be implicated by the *Normative Requirements* of this *Deliverable* must submit a *Licensing Declaration Form* to the Committee Resource Manager within that time.

Deliverable Information

Title	
Document Number	
URL	
Date of Notice	
Submission Deadline	

Manuscript Submission Form

Background

Each author must read (1) the statement of originality and authorship, (2) the copyright assignment agreement, and (3) the potential conflict of interest disclosure, check the appropriate boxes, sign the document where indicated. Each author must submit a completed form.

Manuscript Information

Title _____

Corresponding Author _____

Statement of Originality and Authorship

I approve the submission of this manuscript to the National Emergency Number Association for publication and have taken due care to ensure the integrity of this work. I attest that each *Submitter* has made an important contribution to the study and has assisted with the drafting or revising of the manuscript.

I confirm that neither the manuscript nor any part of it has been published or is under consideration for publication elsewhere (abstracts excluded). Any reference to or use of previously published material protected by copyright is explicitly acknowledged in the manuscript. Posting of submitted material on a Web site may be considered prior publication and should be noted in comments to the editor upon submission.

Copyright Assignment

I hereby represents that I am an author of the submitted *Manuscript*, and warrant that no undisclosed party holds any other or superior interest in the copyright thereto, and that the corresponding author identified above has the right to accept the terms of this agreement on behalf of me. I hereby convey to the National Emergency Number Association perpetual, unlimited, nonexclusive rights to reproduce, distribute, and display the *Manuscript*, and to authorize others to do the same. I also convey to the National Emergency Number Association the exclusive right to be the first to publish the *Manuscript* in a magazine, journal, or textbook.

I understand that I am permitted to reuse or re-print portions or all of my accepted work, consistent with the rights of my co-authors, if any. In so doing, I agree to clearly state in each copy or presentation that the article was originally published in a NENA Publication, and to identify the publication by name, date of publication, and volume or issue number, if assigned. I understand that I am also permitted to submit the accepted version of this *Manuscript* to my agency/employer for inclusion in their its database, archive, or repository, or to post the accepted version on their personal Web site, consistent with the rights of my co-authors, if any.

Authorization to Submit a Work-For-Hire

☐ This work was produced for an employer as a "work made for hire." An authorized representative of that employer must sign here to indicate copyright assignment on behalf of the author(s). The employer(s) of the author(s) are permitted to transmit the work on internal, secure networks for use by employees only, provided that such use is for the promotion of a business enterprise and does not imply endorsement by NENA.

Authorized Representative _____

Signature _____

Date _____

Declaration for U.S. Government Works

☐ This manuscript was produced by an employee of the United States Government as part of his/her official duties. No copyright exists, and therefore it cannot be transferred.

Potential Conflict of Interest Disclosure

I have read the NENA Policy Statement on Multiplicity of Interest and, by signing below, represent that I have or have not had, in the previous 12 months, a relevant multiplicity of interest with a company whose products or services are *directly* related to the subject matter of their manuscript. A relevant multiplicity of interest includes employment, membership on the board of directors or any fiduciary relationship, ownership of stock, receipt of honoraria or consulting fees, or receipt of financial support or grants for research. For purposes of this form only, Company is defined as a for-profit concern engaged in the development, manufacture, or sale of products, or the provision of services to any person or corporate entity.

If you have multiplicity of interest to disclose, please list on a separate sheet of paper, as well as in the "Disclosure" section of your manuscript, the third-party organization with whom you have relevant affiliations or interests. Please provide sufficient information to enable NENA to make an informed decision. Include (1) the nature of the activity or your role, (2) the type of financial arrangement, if any, between you and the third party, and (3) a description of the business or purpose of the third party.

Name _____

Multiplicity ☐ Yes ☐ No

Signature _____

Date _____

EACH AUTHOR MUST COMPLETE A FORM!

Scan and Email forms to cnussman@nena.org

Annex D – Manuscript Submission Form